

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 192668

TO: Devesh Khare Location: 5c35 / 5c18

Wednesday, June 28, 2006

Art Unit: 1623

Phone: 571-272-0653

Serial Number: 10 / 632875

From: Jan Delaval

Location: Biotech-Chem Library

Remsen 1a51

Phone: 571-272-2504

jan.delaval@uspto.gov

Search Notes



Access DB#______8

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester=s full Name: Devesh k	<u>Chare Examiner #: 7</u>	7931 Date: 06/12/2006			
Art Unit: 1623 Phone Num	ber <u>272-0653</u> Se	rial Number: 10/632,875			
Mail Box: Remsen 5C18 and Bldg/Room Lo	ocation: <u>5C35</u> Results Fo	rmat Preferred (circle): PAPER DISK E-MA	AIL		
If more than one search is submitt	ed, please prioritize s	searches in order of need.			
If more than one search is submitted, please prioritize searches in order of need. **********************************					
Please provide a detailed statement of the sear	Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be				
search Include the elected species or structures	s, key words, synonyms, acr	onyms, and registry numbers, and combine w			
the concept or utility of the invention. Define					
citations, authors, etc, if known. Please attach	a copy of the cover sheet, p	pertinent claims, and abstract.			
Title of Invention: 2',3'-dideoxynucl	eoside analogs for the	treatment or prevention of flaviviri	<u>dae</u>		
inections.					
Inventors (please provide full names): Ray	mond F. Schinazi: Ro	shert Striker: Junying Shi			
Inventors (please provide rum namies). Na	villolid 1°. Schinazi, Re	bert Striker, Junxing Sin			
Earliest priority Filing Date: 08/01/2	002				
For Sequence Searches Only Please include	e all pertinent information (parent, child, divisional, or issued patent			
numbers) along with the appropriate serial nu	ımber.				
Please carry out a search on t	he attached claims she	et; examiner's hints provided.			
Therefore					
Thank you.					
	•				
OTA TO LIGHT ONLY W					
STAFF USE ONLY Searcher:	Type of Search NA Sequence (#)	Vendors and cost where applicable STN			
Searcher Phone #: 23504	AA Sequence (#)	Dialog			
Searcher Location:	Structure (#)	Ouestel/Orbit			
Date Searcher Picked Up: (a) 27/06	Bibliographic	Dr. Link			
Date Completed: 6 128/166	Litigation	Lexis/Nexis			
Searcher Prep & Review Time: Clerical prep time: Stoy	Fulltext Patent Family	Sequence Systems			
Online Time:	Other	Other (specify)			
PTO-1590 (1-2000)					

31. A pharmaceutical composition for the treatment and/or prophylaxis of an HCV infection in a host, comprising an effective treatment amount of a 2',3'-dideoxynucleoside of the formula:

or a pharmaceutically acceptable salt or prodrug thereof, wherein

(i) X is O, S, S=O, SO₂, NR¹, N⁺R¹R², CH₂, CHF or CR³R⁴;

 R^1 and R^2 are independently hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, or C_{3-8} cycloalkyl;

R³ and R⁴ are independently hydrogen, halogen (F, Cl, Br, or I), OH or OR⁵;

R⁵ is hydrogen or a hydroxyl protecting group such as alkyl, acyl or silyl;

- (ii) Y is NH₂, NHR⁶, NR⁶R⁷, OH or OR⁸
 each R⁶, R⁷ and R⁷ is independently H, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₃₋₈ cycloalkyl, cyclopropyl, or C₂₋₆ acyl;
- (iii) Z is chosen from hydrogen, halogen (F, Cl, Br, or I), C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, CN, CF₃, N₃, NO₂, aryl, heteroaryl and COR⁹;

 R^9 is chosen from H, OH, SH, C_{1-6} alkyl, C_{1-6} aminoalkyl, C_{1-6} alkoxy and C_{1-6} thioalkyl; and

(iv) R is hydrogen, phosphate; acyl; -C(O)R¹⁰, alkyl; sulfonate ester; sulfonyl; a lipid; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group, which, when administered in vivo, is capable of providing a compound wherein R is H or phosphate;

 R^{10} is a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, monophosphate, diphosphate, triphosphate, or -P(O)(OR¹¹)₂;

each R¹¹ is independently hydrogen, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl or a hydroxyl-protecting group;

together with pharmaceutically acceptable carrier.

Examiner's hints and search points:

Please search the following specific compounds:

It has been found that β -L- or β -D-2',3'-dideoxynucleosides show inhibitory activity against *Flaviviridae* viruses, and in particular, HCV polymerase. Therefore, a

In one preferred embodiment, the active compound is β -L-2',3'-dideoxy-5-fluorocytidine (also referred to as β -L-ddFC), of the structure:



STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact the searcher or contact:

Mary Hale, Information Branch Supervisor 22507, Remsen 1d86

Vol	untary Results Feedback Form				
A	I am an examiner in Workgroup: Example: 1610				
>	Relevant prior art found, search results used as follows:				
	☐ 102 rejection				
	☐ 103 rejection				
	☐ Cited as being of interest.				
	Helped examiner better understand the invention.				
	Helped examiner better understand the state of the art in their technology.				
	Types of relevant prior art found:				
	☐ Foreign Patent(s)				
	Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)				
>	Relevant prior art not found:				
	Results verified the lack of relevant prior art (helped determine patentability).				
	Results were not useful in determining patentability or understanding the invention.				
Cor	mments:				

Drop officer send completed forms to STIC/Biotech-Chem Library GM1/2-Circ Desk



=> fil reg FILE 'REGISTRY' ENTERED AT 09:13:56 ON 27 JUN 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 JUN 2006 HIGHEST RN 889573-50-6 DICTIONARY FILE UPDATES: 26 JUN 2006 HIGHEST RN 889573-50-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

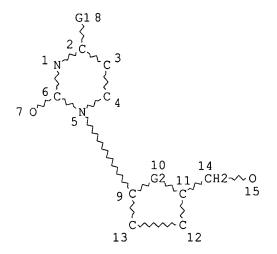
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d sta que 114 L12 STR



VAR G1=N/O

```
VAR G2=O/S/N/C
NODE ATTRIBUTES:
CONNECT IS E2 RC AT
                     12
CONNECT IS E2 RC AT 13
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
GRAPH ATTRIBUTES:
RSPEC 9 5
NUMBER OF NODES IS 15
STEREO ATTRIBUTES: NONE
           3169 SEA FILE=REGISTRY SSS FUL L12
100.0% PROCESSED 119539 ITERATIONS
                                                              3169 ANSWERS
SEARCH TIME: 00.00.01
=> d his
     (FILE 'HOME' ENTERED AT 09:03:28 ON 27 JUN 2006)
                SET COST OFF
     FILE 'HCAPLUS' ENTERED AT 09:03:33 ON 27 JUN 2006
L1
              2 S US20040067877/PN OR (US2003-632875# OR US2002-453715# OR US20
                E SCHINAZI/AU
L2
            511 S E7, E8, E10-E12, E14, E16, E17
                E STRIKER/AU
L3
             14 S E24, E28, E29
                E SHI/AU
L4
              1 S E3
                E SHI J/AU
L5
            316 S E3, E21
                E SHI JUN/AU
            534 S E3
L6
L7
             41 S E74-E77
                E SHI NAME/AU
L8
              6 S E4
                E JUNXING/AU
                E PHARMASSET/PA, CS
L9
             72 S E3-E31
L10
           1431 S L1-L9
                SAV TEMP L10 KHARE632/A
                SEL RN L1
     FILE 'REGISTRY' ENTERED AT 09:07:04 ON 27 JUN 2006
L11
            166 S E1-E166
                SAV TEMP L11 KHARE632A/A
L12
                STR
L13
             50 S L12
L14
           3169 S L12 FUL
                SAV TEMP L14 KHARE632B/A
L15
             16 S L11 AND L14
L16
              1 S L15 AND C9H12FN3O3
L17
             15 S L15 NOT L16
     FILE 'HCAOLD' ENTERED AT 09:10:23 ON 27 JUN 2006
L18
              0 S L16
```

L19

0 S L17

```
FILE 'HCAPLUS' ENTERED AT 09:10:27 ON 27 JUN 2006
L20
             58 S L16
             70 S L17
L21
             20 S L10 AND L20, L21
L22
L23
             73 S L21, L22 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
L24
             19 S L22 AND L23
                E HEPATITIS C/CT
L25
          11421 S E5+OLD, NT
L26
           9774 S E3-E27
                E E27+ALL
           9774 S E7+NT
L27
L28
            207 S E6
                E E6+ALL
L29
          13435 S E6+NT
                E HEPATITIS C/CT
                E E3+ALL
L30
           6193 S E2, E3
              3 S L23 AND L25-L30
L31
L32
              1 S L24 AND L25-L30
L33
              3 S L31, L32
```

FILE 'REGISTRY' ENTERED AT 09:13:56 ON 27 JUN 2006

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 09:14:08 ON 27 JUN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Jun 2006 VOL 145 ISS 1 FILE LAST UPDATED: 26 Jun 2006 (20060626/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 133 all hitstr tot

PA

```
L33 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:120958 HCAPLUS
DN 140:157421
ED Entered STN: 13 Feb 2004
TI 2',3'-dideoxynucleoside analogs for the treatment or prevention of flaviviridae infections
IN Shi, Junxing; Schinazi, Raymond F.; Striker,
Robert
```

Pharmasset Ltd., Barbados; Emory University; Board of Trustees

```
of the Leland Stanford Junior University
SO
     PCT Int. Appl., 86 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LA
IC
    ICM C12N
CC
     1-5 (Pharmacology)
     Section cross-reference(s): 33
FAN.CNT 2
                       KIND DATE APPLICATION NO. DATE
    PATENT NO.
     -----
                       ----
                                           ______
    WO 2004013298 A2
PΙ
                                20040212 WO 2003-US24288 20030801 <--
                        A3 20040401
    WO 2004013298
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003263978 A1 20040223 AU 2003-263978 20030801 <-- US 2004067877 A1 20040408 US 2003-632875 20030801 <--
US 2004067877 P 20040408 U
PRAI US 2002-453715P P 20020801 <--
US 2002-453716P P 20020801 <--
                                20020801 <--
    WO 2003-US24288
                         W
                              20030801
CLASS
               CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
WO 2004013298
                ICM
                       C12N
                IPCI
                       C12N [ICM, 7]
                 IPCR
                       A61K0031-513 [I,A]; A61K0031-513 [I,C*]; A61K0031-553
                        [I,A]; A61K0031-553 [I,C*]; A61K0031-58 [I,A];
                       A61K0031-58 [I,C*]; A61K0031-7042 [I,C*]; A61K0031-7056
                        [I,A]; A61K0031-7068 [I,A]; A61K0031-7072 [I,A];
                       A61K0038-20 [I,A]; A61K0038-20 [I,C*]; A61K0038-21
                        [I,A]; A61K0038-21 [I,C*]; C07H0019-00 [I,C*];
                       C07H0019-06 [I,A]
                 ECLA
                       A61K031/513; A61K031/513+M; A61K031/553; A61K031/553+M;
                       A61K031/58; A61K031/58+M; A61K031/7056+M; A61K031/7068;
                       A61K031/7068+M; A61K031/7072; A61K031/7072+M;
                       A61K038/20K+M; A61K038/21+M; C07H019/06
                       A61K0031-7068 [ICM,7]; A61K0031-7042 [ICM,7,C*]
AU 2003263978
                 IPCI
                 IPCR
                       A61K0031-513 [I,A]; A61K0031-513 [I,C*]; A61K0031-553
                        [I,A]; A61K0031-553 [I,C*]; A61K0031-58 [I,A];
                       A61K0031-58 [I,C*]; A61K0031-7042 [I,C*]; A61K0031-7056
                        [I,A]; A61K0031-7068 [I,A]; A61K0031-7072 [I,A];
                       A61K0038-20 [I,A]; A61K0038-20 [I,C*]; A61K0038-21
                        [I,A]; A61K0038-21 [I,C*]; C07H0019-00 [I,C*];
                       C07H0019-06 [I,A]
US 2004067877
                IPCI
                       A61K0038-16 [ICM,7]; A61K0031-58 [ICS,7]; A61K0031-7072
                        [ICS,7]; A61K0031-7042 [ICS,7,C*]; A61K0031-513 [ICS,7]
                 IPCR
                       A61K0031-513 [I,A]; A61K0031-513 [I,C*]; A61K0031-553
                        [I,A]; A61K0031-553 [I,C*]; A61K0031-58 [I,A];
                       A61K0031-58 [I,C*]; A61K0031-7042 [I,C*]; A61K0031-7068
                        [I,A]; A61K0031-7072 [I,A]; A61K0038-20 [I,A];
                       A61K0038-20 [I,C*]; A61K0038-21 [I,A]; A61K0038-21
                        [I,C*]; C07H0019-00 [I,C*]; C07H0019-06 [I,A]
```

NCL

514/008.000

```
ECLA
                        A61K031/513; A61K031/513+M; A61K031/553; A61K031/553+M;
                        A61K031/58; A61K031/58+M; A61K031/7068; A61K031/7068+M;
                        A61K031/7072; A61K031/7072+M; A61K038/20K+M;
                        A61K038/21+M; C07H019/06
OS
     MARPAT 140:157421
AΒ
     A method for the treatment or prevention of flaviviridae infections, in
     particular, hepatitis C virus infection, in a host, and in particular, a
     human, is provided that includes administering an effective amount of a
     2',3'-dideoxynucleoside or a pharmaceutically acceptable salt or prodrug
     thereof, optionally in a pharmaceutically acceptable diluent or excipient.
     Preparation of compds. of the invention is included.
ST
     dideoxynucleoside deriv prepn antiviral flaviviridae; hepatitis C virus
     antiviral dideoxynucleoside deriv
     Deoxyribonucleosides
ΙT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (2',3'-dideoxyribonucleosides; dideoxynucleoside analog preparation for
        treatment or prevention of flaviviridae infections)
ΙT
     Gene, microbial
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (NS5B; dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
IT
     Antiviral agents
     Drug delivery systems
       Flaviviridae
     Hepatitis B virus
       Hepatitis C virus
     Human
     Human immunodeficiency virus
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
IΤ
     Interferons
     Interleukin 10
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections, and use with other agents)
IT
     Infection
        (viral; dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
IT
     Interferons
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (α, oral; dideoxynucleoside analog preparation for treatment or
        prevention of flaviviridae infections, and use with other agents)
ΙT
     Interferons
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (\gamma lb; dideoxynucleoside analog preparation for treatment or prevention
        of flaviviridae infections, and use with other agents)
IT
     Interferons
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (w; dideoxynucleoside analog preparation for treatment or prevention
        of flaviviridae infections, and use with other agents)
IT
     7439-96-5, Manganese, biological studies 9026-28-2, RNA-dependent RNA
     polymerase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (dideoxynucleoside analog preparation for treatment or prevention of
```

```
flaviviridae infections)
IT
     121154-51-6P 147058-39-7P
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
ΙT
     107036-57-7 121154-51-6D, derivs. 147058-39-7D
     , derivs. 160963-15-5 160963-16-6 161170-31-6
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
ΙT
     108-24-7, Acetic anhydride
                                  2022-85-7, 5-Fluorocytosine
                                                                 6893-26-1,
     D-Glutamic acid
                       34837-55-3, Benzeneselenenyl bromide
     tert-Butyldiphenylsilyl chloride
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
ΙT
     52813-63-5P
                   53558-93-3P
                                 128075-94-5P 128112-71-0P
     153547-97-8P 153547-98-9P 169527-97-3P
                    189818-64-2P
                                   189818-65-3P 189818-67-5P
     189818-62-0P
     221156-18-9P
                    656798-97-9P
                                   656798-98-0P 656798-99-1P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
     656799-00-7P 656799-01-8P 656799-03-0P
IT
     656799-05-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
ΙT
     56-92-8, Ceplene 768-94-5, Amantadine 36791-04-5, Ribavirin
     62304-98-7, Zadaxin
                                                  119567-79-2, Viramidine
                          118390-30-0, Infergen
     198153-51-4, Pegasys
                          198821-22-6, VX 497
                                                  206269-27-4, Levovirin
                         223603-41-6, ISIS 14803 254750-02-2, IDN-6556
     220581-49-7, Rebif
     402957-28-2, LY 570310
                              472960-22-8, Albuferon
                                                       632385-00-3, Heptazyme
     656836-15-6, IP 501
                                                  656836-17-8, HCV/MF 59
                          656836-16-7, XTL 002
     656836-18-9, Civacir
                           656836-19-0, JTK 003
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections, and use with other agents)
ΙT
    121154-51-6P 147058-39-7P
    RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
    preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (dideoxynucleoside analog preparation for treatment or prevention of
        flaviviridae infections)
RN
     121154-51-6 HCAPLUS
CN
     2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-
     furanyl]- (9CI)
                     (CA INDEX NAME)
```

Absolute stereochemistry. Rotation (-).

RN 147058-39-7 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 107036-57-7 121154-51-6D, derivs. 147058-39-7D

, derivs. 160963-15-5 160963-16-6 161170-31-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(dideoxynucleoside analog preparation for treatment or prevention of

flaviviridae infections)

RN 107036-57-7 HCAPLUS CN Cytidine, 5-bromo-2',3'-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 121154-51-6 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 147058-39-7 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 160963-15-5 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-chloro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 160963-16-6 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-iodo-1-{(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 161170-31-6 HCAPLUS

CN Triphosphoric acid, P-[(2R,5S)-[5-(4-amino-5-fluoro-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 128112-71-0P 153547-97-8P 153547-98-9P 169527-97-3P 189818-67-5P 656798-99-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(dideoxynucleoside analog preparation for treatment or prevention of flaviviridae infections)

RN 128112-71-0 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 153547-97-8 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 153547-98-9 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 169527-97-3 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S,5R)-5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]- (9CI) (CFINDEX NAME)

Absolute stereochemistry.

RN 189818-67-5 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-5-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 656798-99-1 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S,5R)-5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-5-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 656799-00-7P 656799-01-8P 656799-03-0P 656799-05-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (dideoxynucleoside analog preparation for treatment or prevention of flaviviridae infections)

RN 656799-00-7 HCAPLUS

CN Triphosphoric acid, P-[[(2R,5S)-5-(4-amino-5-fluoro-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 161170-31-6 CMF C9 H15 F N3 O12 P3

Absolute stereochemistry.

CM 2

CRN 121-44-8 CMF C6 H15 N

RN 656799-01-8 HCAPLUS CN Triphosphoric acid, F

Triphosphoric acid, P-[[(2R,5S)-5-(4-amino-2-oxo-1(2H)-pyrimidinyl)] ester, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 161170-30-5 CMF C9 H16 N3 O12 P3 Absolute stereochemistry.

CM 2

CRN 121-44-8 CMF C6 H15 N

RN 656799-03-0 HCAPLUS

CN Triphosphoric acid, P-[[(2R,5S)-5-(5-fluoro-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 656799-02-9 CMF C9 H14 F N2 O13 P3

Absolute stereochemistry.

CM 2

CRN 121-44-8 CMF C6 H15 N

RN 656799-05-2 HCAPLUS CN Triphosphoric acid, P-[[(2R,5S)-5-(3,4-dihydro-2,4-dioxo-1(2H)-

jan delaval - 28 june 2006

pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 656799-04-1 CMF C9 H15 N2 O13 P3

Absolute stereochemistry.

CM 2

CRN 121-44-8 CMF C6 H15 N

```
L33 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
     2002:905731 HCAPLUS
AN
     138:14152
DN
     Entered STN: 29 Nov 2002
ED
TΙ
     Preparation of enzymic ribonucleic acid peptide conjugates as antitumor
     and antiviral agents and compositions for cellular delivery
IN
     Beigelman, Leonid; Matulic-Adamic, Jasenka; Vargeese, Chandra; Karpeisky,
     Alexander; Blatt, Lawrence; Shaffer, Christopher
PΑ
     Ribozyme Pharmaceuticals, Inc, USA
SO
     PCT Int. Appl., 220 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K
CC
     33-7 (Carbohydrates)
     Section cross-reference(s): 1, 7, 34, 63
FAN.CNT 233
     PATENT NO.
                        KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                         ----
                                -----
                                            ______
                                                                   _____
PΙ
     WO 2002094185
                         A2
                                20021128
                                            WO 2002-US15876
                                                                   20020520 <--
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
```

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,

```
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 9851819
                     A1 19980611 AU 1998-51819
                                                               19980112 <--
AU 729657
                     B2
                           20010208
AU 9939188
                     A1
                           19990916
                                       AU 1999-39188
                                                               19990713 <--
AU 769175
                    В2
                           20040115
                                       AU 2000-56616
                                                               20000911 <--
                    A2
EP 1572067
                           20050914
                                       EP 2002-746413
                                                               20020517 <--
       AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
CA 2447161
                           20021128
                    AA
                                       CA 2002-2447161
                                                               20020520 <--
JP 2005505504
                    Т2
                           20050224
                                       JP 2002-590906
                                                               20020520 <--
US 2004110296
                   A1
                           20040610
                                       US 2003-427160
                                                               20030430 <--
US 2004192626
                   A1
                           20040930
                                       US 2003-444853
                                                               20030523 <--
US 2005080031
                   A1
                           20050414
                                       US 2003-724270
                                                               20031126 <--
US 2004249178
                   A1
                           20041209
                                       US 2004-780447
                                                               20040213 <--
US 2005096284
                   A1
                           20050505
                                       US 2004-783128
                                                               20040220 <--
US 2005014172
                   A1
                           20050120
                                       US 2004-798090
                                                               20040311 <--
US 2005048529
                   A1
                           20050303
                                       US 2004-800487
                                                               20040315 <--
US 2005191638
                   A1
                           20050901
                                       US 2004-824036
                                                               20040414 <--
US 2005032733
                   A1
                           20050210
                                       US 2004-826966
                                                               20040416 <--
US 2005054598
                   A1
                           20050310
                                       US 2004-830569
                                                               20040423 <--
US 2005148530
                   A1
                           20050707
                                       US 2004-831620
                                                               20040423 <---
US 2005233996
                   A1
                           20051020
                                       US 2004-832522
                                                               20040426 <--
US 2005137153
                   A1
                           20050623
                                       US 2004-840731
                                                              20040506 <--
US 2005171039
                   A1
                           20050804
                                       US 2004-844076
                                                              20040511 <--
US 2005159376
                           20050721
                                       US 2004-844072
                   A1
                                                              20040512 <--
US 2005137155
                           20050623
                   Α1
                                       US 2004-861060
                                                              20040603 <--
US 2005143333
                           20050630
                   A 1
                                       US 2004-863973
                                                              20040609 <--
US 2005171040
                   A1
                           20050804
                                       US 2004-864044
                                                              20040609 <--
US 2005119211
                   A1
                           20050602
                                       US 2004-869638
                                                              20040616 <--
US 2005119212
                   A1
                           20050602
                                       US 2004-871222
                                                              20040618 <--
US 2005209179
                           20050922
                   A1
                                       US 2004-877889
                                                              20040625 <--
US 2005124566
                                                               20040628 <--
                   A1
                           20050609
                                       US 2004-879867
US 2005130181
                           20050616
                   A1
                                       US 2004-881118
                                                               20040630 <--
US 2005124567
                   A1
                           20050609
                                       US 2004-883218
                                                              20040701 <--
US 2005124568
                           20050609
                   Α1
                                       US 2004-888226
                                                              20040709 <--
US 2005124569
                           20050609
                   Α1
                                       US 2004-892922
                                                              20040716 <--
US 2005164224
                           20050728
                   Α1
                                       US 2004-893010
                                                              20040716 <--
US 2005070497
                           20050331
                                       US 2004-894475
                   Α1
                                                              20040719 <--
US 2005176663
                   A1
                           20050811
                                       US 2004-897902
                                                              20040723 <--
US 2005196765
                                       US 2004-898660
                    A1
                           20050908
                                                              20040723 <--
US 2005277608
                    A1
                           20051215
                                       US 2004-898311
                                                              20040723 <--
US 2005182006
                           20050818
                                       US 2004-903128
                    A1
                                                              20040730 <--
US 2005159378
                           20050721
                                       US 2004-915896
                    A1
                                                              20040811 <--
US 2005159379
                    A1
                           20050721
                                       US 2004-916030
                                                              20040811 <--
US 2005158735
                   A1
                           20050721
                                       US 2004-916095
                                                              20040811 <--
US 2005153914
                   A1
                           20050714
                                       US 2004-918969
                                                              20040816 <--
US 2005164966
                   A1
                           20050728
                                       US 2004-918896
                                                              20040816 <--
US 2005203040
                   Α1
                           20050915
                                       US 2004-918987
                                                              20040816 <--
US 2005176664
                    A1
                           20050811
                                       US 2004-919866
                                                              20040817 <--
US 2005176665
                    A1
                           20050811
                                       US 2004-919964
                                                              20040817 <---
US 2005233997
                    A1
                           20051020
                                       US 2004-919584
                                                              20040817 <--
US 2005136436
                    Α1
                           20050623
                                       US 2004-923640
                                                              20040819 <--
US 2005153915
                    A1
                           20050714
                                       US 2004-922544
                                                              20040819 <--
US 2005159380
                    A1
                           20050721
                                       US 2004-922626
                                                              20040819 <--
US 2005159382
                    A1
                           20050721
                                       US 2004-923580
                                                              20040819 <--
US 2005164967
                    Α1
                           20050728
                                       US 2004-922034
                                                              20040819 <--
US 2005079610
                                       US 2004-923115
                    Α1
                           20050414
                                                              20040820 <--
US 2005153916
                    A1
                           20050714
                                       US 2004-923330
                                                              20040820 <--
US 2005159381
                    A1
                           20050721
                                       US 2004-923522
                                                              20040820 <--
US 2005164968
                    Α1
                           20050728
                                       US 2004-923329
                                                              20040820 <--
```

```
US 2005170371
                          Α1
                                20050804
                                             US 2004-922340
                                                                    20040820 <--
     US 2005176666
                          A 1
                                20050811
                                             US 2004-923182
                                                                    20040820 <--
     US 2005176024
                         A1
                                20050811
                                             US 2004-923354
                                                                    20040820 <--
                         A1
     US 2005176025
                                20050811
                                             US 2004-923516
                                                                    20040820 <--
                         A1
     US 2005182007
                                20050818
                                             US 2004-922675
                                                                    20040820 <--
                         A1
                                20050818
     US 2005182008
                                             US 2004-923142
                                                                    20040820 <--
                         A1
                                20050818
                                             US 2004-923201
     US 2005182009
                                                                    20040820 <--
     US 2005187174
                         A1
                                20050825
                                             US 2004-923181
                                                                    20040820 <--
     US 2005191618
                         A1
                                20050901
                                             US 2004-923473
                                                                    20040820 <--
     US 2005196767
                         A1
                                             US 2004-923380
                                                                    20040820 <--
                                20050908
     US 2005227935
                         A1
                                20051013
                                             US 2004-923470
                                                                    20040820 <--
     US 2005227936
                         A1
                                20051013
                                             US 2004-923475
                                                                    20040820 <--
     US 2005233344
                                20051020
                         A1
                                             US 2004-923270
                                                                    20040820 <--
     US 2005239731
                                20051027
                                             US 2004-923379
                         A1
                                                                    20040820 <--
     US 2005256068
                         A1
                                20051117
                                             US 2004-923451
                                                                    20040820 <--
     US 2005267058
                         A1
                                20051201
                                             US 2004-922761
                                                                    20040820 <--
     US 2005288242
                         A1
                                20051229
                                             US 2004-923476
                                                                    20040820 <--
     US 2005209180
                         A1
                                20050922
                                             US 2004-942560
                                                                    20040915 <--
     US 2005233998
                         A1
                                20051020
                                             US 2004-944611
                                                                    20040916 <--
     US 2005222066
                         A1
                                20051006
                                             US 2004-962898
                                                                    20041012 <--
     US 2005261219
                         A1
                                20051124
                                             US 2004-1347
                                                                    20041201 <--
     US 2005196781
                         A1
                                20050908
                                             US 2004-14373
                                                                    20041215 <---
     US 2006019913
                         A1
                                20060126
                                             US 2005-31668
                                                                    20050106 <--
     US 2006025361
                         Α1
                                20060202
                                             US 2005-35813
                                                                    20050114 <--
     US 2005287128
                         A1
                                20051229
                                             US 2005-54047
                                                                    20050209 <--
     US 2005260620
                         Α1
                                20051124
                                             US 2005-58582
                                                                    20050215 <--
     US 2005277133
                         A1
                                20051215
                                             US 2005-63415
                                                                    20050222 <--
     US 2005282188
                         Α1
                                20051222
                                             US 2005-98303
                                                                    20050404 <--
     US 2006019917
                         A1
                                20060126
                                            US 2005-140328
                                                                   20050527 <--
PRAI US 2001-292217P
                         P
                                20010518
                                          <--
     US 2001-306883P
                         Р
                                20010720
                                          <--
     US 2001-311865P
                         Ρ
                                20010813
                                          <--
                         P
     US 2002-362016P
                                20020306
                                          <--
    AU 1995-26422
                         A3
                                19950518
                                          <--
    US 1996-623891
                         Α
                                19960325
                                          <--
    AU 1996-76662
                          Α3
                                19961025
                                          <--
    US 2000-181797P
                         P
                                20000211
                                          <--
    US 2001-780533
                         B2
                                20010209
                                          <--
    WO 2001-US4273
                         A2
                                20010209
                                          <--
                         В2
    US 2001-827395
                                20010405
                                          <--
    US 2001-294140P
                         P
                                20010529
                                          <--
                         Р
    US 2001-296249P
                                20010606
                                          <--
    US 2001-916466
                         В1
                                20010725
                                          <--
    US 2001-930423
                         B2
                                20010815
                                          <--
    US 2001-318471P
                         P
                                20010910
                                          <--
                          Р
    US 2001-334461P
                                20011130
                                          <--
    US 2002-358580P
                          Ρ
                                20020220
                                          <--
    US 2002-363124P
                         Ρ
                                20020311
                                          <--
    WO 2002-US9187
                          A2
                                20020326
                                          <--
    WO 2002-US10512
                          Α2
                                20020403
                                          <--
    US 2002-374722P
                          P
                                20020422
                                          <--
    US 2002-151116
                          A2
                                20020517
                                          <--
    WO 2002-US15876
                          W
                                20020520
                                          <--
    US 2002-157580
                          Α2
                                20020529
                                          <--
    WO 2002-US16840
                          Α2
                                20020529
                                          <--
    WO 2002-US17674
                          A2
                                20020529
                                          <--
    US 2002-163552
                          Α2
                                20020606
                                          <--
    US 2002-386782P
                          Р
                                20020606
                                          <--
                          Р
    US 2002-393796P
                                20020703
                                          <--
                          Р
    US 2002-393924P
                                20020703
                                          <--
```

```
US 2002-396600P
                     Ρ
                           20020717
                                      <--
US 2002-396905P
                     Ρ
                           20020718
                                      <--
                    A2
US 2002-201394
                           20020722
                                      <--
                    Р
US 2002-398036P
                           20020723
                                      <--
US 2002-205309
                    A2
                           20020725
                                      <--
                    A2
US 2002-206705
                           20020726
                                      <--
                    P
US 2002-399348P
                           20020729
                                      <--
                     Р
US 2002-401093P
                           20020805
                                      <--
                    Ρ
US 2002-401104P
                           20020805
                                      <--
                    Ρ
US 2002-404039P
                           20020815
                                      <--
US 2002-225023
                    A2
                           20020821
                                      <--
                    Ρ
US 2002-406784P
                           20020829
                                      <--
                     Ρ
US 2002-408378P
                           20020905
                                      <--
US 2002-409293P
                     Ρ
                           20020909
                                      <--
US 2002-409493P
                    Ρ
                           20020909
                                      <--
US 2002-238700
                    A2
                           20020910
                                      <--
US 2002-409785P
                    Р
                           20020911
                                      <--
US 2002-411275P
                     Ρ
                           20020917
                                      <--
US 2002-411707P
                    Р
                           20020918
                                      <--
US 2002-251117
                    A2
                           20020919
                                      <--
US 2002-412304P
                     Ρ
                           20020920
                                      <--
US 2002-413714P
                     Р
                           20020926
                                      <--
US 2002-418655P
                     Ρ
                           20021015
                                      <--
US 2002-277494
                    В2
                           20021021
                                      <--
US 2002-287949
                     A2
                           20021104
                                      <--
US 2002-425559P
                     Ρ
                           20021112
                                      <--
US 2002-427467P
                    Р
                           20021119
                                      <--
US 2002-306747
                    Α2
                           20021127
                                      <--
                                      <--
US 2002-429359P
                     Ρ
                           20021128
US 2002-431105P
                     Р
                           20021205
                                      <--
US 2003-439922P
                     Р
                           20030114
                     Ρ
US 2003-440129P
                           20030115
WO 2003-US2510
                    A2
                           20030128
WO 2003-US3473
                    A2
                           20030205
WO 2003-US3662
                    A2
                           20030206
WO 2003-US4034
                    A2
                           20030211
WO 2003-US4088
                    Α2
                           20030211
WO 2003-US4123
                    A2
                           20030211
WO 2003-US4347
                    A2
                           20030211
WO 2003-US4566
                    A2
                           20030211
WO 2003-US7273
                    A2
                           20030211
WO 2003-US4250
                    A2
                           20030213
WO 2003-US4317
                    A2
                           20030213
WO 2003-US4397
                    A2
                           20030213
WO 2003-US4402
                     A2
                           20030213
WO 2003-US4448
                     A2
                           20030213
WO 2003-US4710
                     A2
                           20030218
WO 2003-US4738
                     A2
                           20030218
WO 2003-US4907
                     A2
                           20030218
WO 2003-US4908
                     A2
                           20030218
WO 2003-US4909
                    A2
                           20030218
WO 2003-US4741
                    Α2
                           20030220
WO 2003-US4951
                     A2
                           20030220
WO 2003-US5022
                     A2
                           20030220
WO 2003-US5028
                     A2
                           20030220
WO 2003-US5043
                     Α2
                           20030220
WO 2003-US5044
                     A2
                           20030220
WO 2003-US5045
                     A2
                           20030220
WO 2003-US5162
                     A2
                           20030220
WO 2003-US5190
                     Α
                           20030220
```

WO	2003-US5234	A2	20030220
WO	2003-US5326	A2	20030220
WO	2003-US5346	A2	20030220
US	2003-417012	A1	20030416
US	2003-420194	A2	20030422
WO	2003-US12626	A2	20030422
US	2003-422704	A2	20030424
US	2003-424339	A2	20030425
US	2003-427160	A2	20030430
US US	2003-430882 2003-444853	A2 A2	20030506 20030523
US	2003-444633	A2 A2	20030523
US	2003-486729P	P	20030711
US	2003-652791	A2	20030829
US	2003-664767	B2	20030916
US	2003-665255	A2	20030916
US	2003-667271	A2	20030916
US	2003-664668	A2	20030918
US US	2003-665951 2003-670011	A2 A2	20030918 20030923
US	2003-683990	A2 A2	20030923
US	2003-512701P	P	20031010
US	2003-693059	A2	20031023
US	2003-698311	A2	20031031
US	2003-712633	A2	20031113
US	2003-720448 2003-724270	A2	20031124 20031126
US US	2003-724270	A2 A2	20031126
US	2003-720230	A2	20031202
US	2003-738128	A2	20031218
US	2004-758155	A2	20040112
US	2004-757803	A2	20040114
US	2004-764957	A2	20040126
US US	2004-543480P 2004-780447	P A2	20040210 20040213
US	2004-783128	A2	20040213
US	2004-798090	A2	20040311
US	2004-800487	A2	20040315
US	2004-824036	A2	20040414
US	2004-825485	A2	20040415
US WO	2004-826966 2004-US11848	A2 A2	20040416
US	2004-0311646	A2	20040418
US	2004-831620	A2	20040423
WO	2004-US12517	A2	20040423
US	2004-832522	A2	20040426
WO	2004-US13456	A2	20040430
US US	2004-570086P 2004-844076	P A2	20040511 20040511
US	2004-844076	A2	20040511
WO	2004-US16390	A2	20040524
US	2004-863973	A2	20040609
US	2004-894475	A2	20040719
US	2004-922675	A2	20040820
US US	2004-923475 2004-923536	A2 A2	20040820 20040820
US	2004-944611	A2	20040020
US	2005-31668	A1	20050106
US	2005-39680	A2	20050118
WO	2005-US4270	A2	20050209

```
US 2005-98303
                         A2
                               20050404
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
                       _____
 -----
                ____
WO 2002094185
                ICM
                       A61K
                IPCI
                       A61K [ICM, 7]
                IPCR
                       A61K [I,S]; A61K0006-00 [I,A]; A61K0006-00 [I,C*];
                       A61K0031-519 [I,A]; A61K0031-519 [I,C*]; A61K0031-52
                       [I,A]; A61K0031-7042 [I,C*]; A61K0031-7048 [I,A];
                       A61K0031-7052 [I,A]; A61K0031-706 [I,A]; A61K0031-7088
                       [I,A]; A61K0031-7088 [I,C*]; A61K0031-712 [I,A];
                       A61K0031-712 [I,C*]; A61P0031-00 [I,C*]; A61P0031-12
                       [I,A]; A61P0031-14 [I,A]; A61P0031-16 [I,A];
                       A61P0031-18 [I,A]; A61P0031-20 [I,A]; A61P0035-00
                       [I,A]; A61P0035-00 [I,C*]; A61P0035-02 [I,A];
                       A61P0043-00 [I,A]; A61P0043-00 [I,C*]; C07D0475-00
                       [I,A]; C07D0475-00 [I,C*]; C07D0475-04 [I,A];
                       C07H0019-00 [I,C*]; C07H0019-16 [I,A]; C07H0019-167
                       [I,A]; C07H0019-207 [I,A]; C07H0019-22 [I,A];
                       C07H0021-00 [I,A]; C07H0021-00 [I,C*]; C07H0021-04
                       [I,A]; C12P0017-18 [I,A]; C12P0017-18 [I,C*];
                       C12Q0001-68 [N,A]; C12Q0001-68 [N,C*]; G01N0033-53
                       [I,A]; G01N0033-53 [I,C*]
                ECLA
                       A61K047/48H4F4
AU 9851819
                IPCI
                       C07H0021-02 [ICM, 6]; C07H0021-04 [ICS, 6]; C07H0021-00
                       [ICS, 6, C*]; C12N0015-11 [ICS, 6]; C12N0015-10 [ICS, 6];
                       C12N0005-10 [ICS,6]; C12N0015-63 [ICS,6]; A61K0038-43
                       [ICS, 6]; C12Q0001-68 [ICS, 6]
                IPCR
                       A61K0038-43 [I,A]; A61K0038-43 [I,C*]; C07H0021-00
                       [I,C*]; C07H0021-02 [I,A]; C07H0021-04 [I,A];
                       C12N0005-10 [I,A]; C12N0005-10 [I,C*]; C12N0015-10
                       [I,A]; C12N0015-10 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-63 [I,A]; C12N0015-63
                       [I,C*]; C12Q0001-68 [I,A]; C12Q0001-68 [I,C*]
AU 9939188
                IPCI
                       C12N0015-11 [ICM, 6]; C12N0009-00 [ICS, 6]; C12N0005-10
                       [ICS, 6]; A61K0048-00 [ICS, 6]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C12N0005-10
                       [I,A]; C12N0005-10 [I,C*]; C12N0009-00 [I,A];
                       C12N0009-00 [I,C*]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]
AU 769175
                IPCI
                       C12N0015-11 [ICM,7]; A61K0048-00 [ICS,7]; C12N0005-10
                       [ICS, 7]; C12N0009-00 [ICS, 7]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C12N0005-10
                       [I,A]; C12N0005-10 [I,C*]; C12N0009-00 [I,A];
                       C12N0009-00 [I,C*]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]
EP 1572067
                IPCI
                       A61K0006-00 [ICM, 7]
                IPCR
                       A61K [I,S]; A61K0006-00 [I,A]; A61K0006-00 [I,C*];
                       A61K0031-519 [I,A]; A61K0031-519 [I,C*]; A61K0031-52
                       [I,A]; A61K0031-7042 [I,C*]; A61K0031-7048 [I,A];
                       A61K0031-7052 [I,A]; A61K0031-706 [I,A]; A61K0031-7088
                       [I,A]; A61K0031-7088 [I,C*]; A61K0031-712 [I,A];
                       A61K0031-712 [I,C*]; A61P0031-00 [I,C*]; A61P0031-12
                       [I,A]; A61P0031-14 [I,A]; A61P0031-16 [I,A];
                       A61P0031-18 [I,A]; A61P0031-20 [I,A]; A61P0035-00
                       [I,A]; A61P0035-00 [I,C*]; A61P0035-02 [I,A];
                       A61P0043-00 [I,A]; A61P0043-00 [I,C*]; C07D0475-00
                       [I,A]; C07D0475-00 [I,C*]; C07D0475-04 [I,A];
                       C07H0019-00 [I,C*]; C07H0019-16 [I,A]; C07H0019-167
                       [I,A]; C07H0019-207 [I,A]; C07H0019-22 [I,A];
```

```
C07H0021-00 [I,A]; C07H0021-00 [I,C*]; C07H0021-04
                       [I,A]; C12P0017-18 [I,A]; C12P0017-18 [I,C^*];
                       C12Q0001-68 [N,A]; C12Q0001-68 [N,C*]; G01N0033-53
                       [I,A]; G01N0033-53 [I,C*]
                ECLA
                       A61K047/48H4F4
CA 2447161
                IPCI
                       C07D0475-00 [ICM, 7]; C07H0021-00 [ICS, 7]; A61P0035-00
                       [ICS,7]; A61P0031-12 [ICS,7]; A61P0031-00 [ICS,7,C*];
                       C07H0019-16 [ICS,7]; C07H0019-167 [ICS,7]; C07H0019-22
                       [ICS,7]; C07H0019-00 [ICS,7,C*]; A61K0031-519 [ICS,7];
                       A61K0031-52 [ICS,7]; A61K0031-7048 [ICS,7];
                       A61K0031-7052 [ICS,7]; A61K0031-7042 [ICS,7,C*];
                       A61K0031-7088 [ICS, 7]
                IPCR
                       A61K [I,S]; A61K0006-00 [I,A]; A61K0006-00 [I,C*];
                       A61K0031-519 [I,A]; A61K0031-519 [I,C*]; A61K0031-52
                       [I,A]; A61K0031-7042 [I,C*]; A61K0031-7048 [I,A];
                       A61K0031-7052 [I,A]; A61K0031-706 [I,A]; A61K0031-7088
                       [I,A]; A61K0031-7088 [I,C^*]; A61K0031-712 [I,A];
                       A61K0031-712 [I,C*]; A61P0031-00 [I,C*]; A61P0031-12
                       [I,A]; A61P0031-14 [I,A]; A61P0031-16 [I,A];
                       A61P0031-18 [I,A]; A61P0031-20 [I,A]; A61P0035-00
                       [I,A]; A61P0035-00 [I,C*]; A61P0035-02 [I,A];
                       A61P0043-00 [I,A]; A61P0043-00 [I,C*]; C07D0475-00
                       [I,A]; C07D0475-00 [I,C*]; C07D0475-04 [I,A];
                       C07H0019-00 [I,C*]; C07H0019-16 [I,A]; C07H0019-167
                       [I,A]; C07H0019-207 [I,A]; C07H0019-22 [I,A];
                       C07H0021-00 [I,A]; C07H0021-00 [I,C*]; C07H0021-04
                       [I,A]; C12P0017-18 [I,A]; C12P0017-18 [I,C*];
                       C12Q0001-68 [N,A]; C12Q0001-68 [N,C*]; G01N0033-53
                       [I,A]; G01N0033-53 [I,C*]
                ECLA
                       A61K047/48H4F4
JP 2005505504
                IPCI
                       C07D0475-04 [ICM, 7]; C07D0475-00 [ICM, 7, C*];
                       A61K0031-519 [ICS,7]; A61K0031-706 [ICS,7];
                       A61K0031-7042 [ICS,7,C*]; A61K0031-712 [ICS,7];
                       A61P0031-12 [ICS,7]; A61P0031-14 [ICS,7]; A61P0031-16
                       [ICS,7]; A61P0031-18 [ICS,7]; A61P0031-20 [ICS,7];
                       A61P0031-00 [ICS,7,C*]; A61P0035-00 [ICS,7];
                       A61P0035-02 [ICS,7]; A61P0043-00 [ICS,7]; C07H0019-207
                       [ICS,7]; C07H0019-00 [ICS,7,C*]; C07H0021-04 [ICS,7];
                       C07H0021-00 [ICS,7,C*]; C12P0017-18 [ICS,7];
                       G01N0033-53 [ICS,7]; C12Q0001-68 [ICS,7]
                IPCR
                       A61K [I,S]; A61K0006-00 [I,A]; A61K0006-00 [I,C*];
                       A61K0031-519 [I,A]; A61K0031-519 [I,C*]; A61K0031-52
                       [I,A]; A61K0031-7042 [I,C*]; A61K0031-7048 [I,A];
                       A61K0031-7052 [I,A]; A61K0031-706 [I,A]; A61K0031-7088
                       [I,A]; A61K0031-7088 [I,C*]; A61K0031-712 [I,A];
                       A61K0031-712 [I,C*]; A61P0031-00 [I,C*]; A61P0031-12
                       [I,A]; A61P0031-14 [I,A]; A61P0031-16 [I,A];
                       A61P0031-18 [I,A]; A61P0031-20 [I,A]; A61P0035-00
                       [I,A]; A61P0035-00 [I,C*]; A61P0035-02 [I,A];
                       A61P0043-00 [I,A]; A61P0043-00 [I,C*]; C07D0475-00
                       [I,A]; C07D0475-00 [I,C*]; C07D0475-04 [I,A];
                       C07H0019-00 [I,C*]; C07H0019-16 [I,A]; C07H0019-167
                       [I,A]; C07H0019-207 [I,A]; C07H0019-22 [I,A];
                       C07H0021-00 [I,A]; C07H0021-00 [I,C*]; C07H0021-04
                       [I,A]; C12P0017-18 [I,A]; C12P0017-18 [I,C*];
                       C12Q0001-68 [N,A]; C12Q0001-68 [N,C*]; G01N0033-53
                       [I,A]; G01N0033-53 [I,C*]
                FTERM
                       4B063/QA01; 4B063/QQ01; 4B063/QQ41; 4B063/QR41;
                       4B063/QR42; 4B063/QS36; 4B063/QX02; 4B063/QX07;
                       4B064/AE57; 4B064/CB06; 4B064/CC03; 4B064/CD12;
```

```
4B064/DA01; 4C057/AA17; 4C057/AA18; 4C057/BB02;
                       4C057/BB05; 4C057/CC03; 4C057/DD01; 4C057/DD03;
                       4C057/LL34; 4C057/LL41; 4C057/MM04; 4C057/MM05;
                       4C057/MM09; 4C086/AA01; 4C086/AA02; 4C086/AA03;
                       4C086/AA04; 4C086/CB09; 4C086/EA16; 4C086/EA18;
                       4C086/MA01; 4C086/MA04; 4C086/NA14; 4C086/ZB21;
                       4C086/ZB26; 4C086/ZB27; 4C086/ZB33; 4C086/ZC41;
                       4C086/ZC55
US 2004110296
                IPCI
                       C12N0015-88 [ICM, 7]; C12N0015-87 [ICM, 7, C*];
                       C07J0001-00 [ICS,7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C*]
                NCT.
                       435/458.000
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                ECLA
                       C12N015/11B3; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M
US 2004192626
                IPCI
                       A61K0048-00 [ICM]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C^*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4F4; C12N015/11B1A; C12N015/11B3;
                       C12N015/11D; C12N015/11H
US 2005080031
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0045-00
                       [I,C*]; A61K0045-06 [I,A]; A61K0047-48 [I,A];
                       A61K0047-48 [I,C*]; C07H0021-00 [I,C*]; C07H0021-02
                       [I,A]; C12N0015-11 [I,A]; C12N0015-11 [I,C*];
                       C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K045/06; A61K047/48H4; A61K047/48H4F4; C07H021/02;
                       C12N015/11B; C12N015/11B1A; C12N015/11B2; C12N015/11B5;
                       C12N015/11B7; C12N015/11D; C12N015/11H; C12N015/11M;
                       C12N015/87
US 2004249178
                IPCI
                       C07J0001-00 [ICM, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C*]
                NCL
                       552/506.000
                ECLA
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                       C12N015/11B3; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M
US 2005096284
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C*]; C12N0015-87 [I,A];
                       C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                       C12N015/11B5; C12N015/11B7; C12N015/11D; C12N015/11H;
                       C12N015/11M; C12N015/87
US 2005014172
                IPCI
                       C12Q0001-68 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]; A61K0048-00 [ICS, 7]
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                IPCR
                       [I,A]; C12N0015-11 [I,C*]; C12N0015-87 [I,A];
                       C12N0015-87 [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                       C12N015/11B5; C12N015/11B7; C12N015/11D; C12N015/11H;
                       C12N015/11M; C12N015/87
US 2005048529
                IPCI
                       C12Q0001-68 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
```

```
[ICS, 7, C*]; A61K0048-00 [ICS, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C*]; C12N0015-87 [I,A];
                       C12N0015-87 [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                       C12N015/11B5; C12N015/11B7; C12N015/11D; C12N015/11H;
                       C12N015/11M; C12N015/87
US 2005191638
                IPCI
                       C12Q0001-68 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]; A61K0048-00 [ICS, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       CO7H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4; C07H021/02; C12N015/11B; C12N015/11B1A;
                       C12N015/11B5; C12N015/11B7; C12N015/11D; C12N015/11H;
                       C12N015/11M; C12N015/87
US 2005032733
                IPCI
                       A61K0048-00 [ICM]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C*]; C12N0015-87 [I,A];
                       C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                       C12N015/11B5; C12N015/11B7; C12N015/11D; C12N015/11H;
                       C12N015/11M; C12N015/87
US 2005054598
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C*]; C12N0015-87 [I,A];
                       C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                       C12N015/11B5; C12N015/11B7; C12N015/11D; C12N015/11H;
                       C12N015/11M; C12N015/87
US 2005148530
                IPCI
                       CO7HO021-02 [ICM, 7]; CO7HO021-00 [ICM, 7, C*];
                       A61K0048-00 [ICS,7]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                       [I,C*]; C07H0021-02 [I,A]
                NCL
                       514/044.000
US 2005233996
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                NCL
                       514/044.000
US 2005137153
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005171039
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                       [I,C^*]; C07H0021-02 [I,A]
                NCL
                       514/044.000
US 2005159376
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
```

```
IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       514/044.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005137155
                IPCI
                       A61K0048-00 [ICM]; C07H0021-02 [ICS]; C07H0021-00
                       [ICS,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]; H01L0021-02 [I,C*]; H01L0021-331 [I,A];
                       H01L0029-02 [I,C*]; H01L0029-08 [I,A]; H01L0029-161
                       [N,A]; H01L0029-40 [I,C*]; H01L0029-45 [I,A];
                       H01L0029-66 [I,C*]; H01L0029-737 [I,A]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87; H01L021/331P2;
                       H01L029/08B7; H01L029/45B; H01L029/737B
US 2005143333
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS, 7]; C07H0021-00 [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005171040
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
                       C07H0021-02 [ICM,7]; C07H0021-00 [ICM,7,C*];
US 2005119211
                IPCI
                       A61K0048-00 [ICS,7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       514/044.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005119212
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       514/044.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
```

```
C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005209179
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                       [I,C^*]; C07H0021-02 [I,A]
                NCL
                       514/044.000
US 2005124566
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]; C12N0015-85 [ICS, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005130181
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005124567
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-04 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005124568
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       514/044.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005124569
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0045-00
                       [I,C*]; A61K0045-06 [I,A]; A61K0047-48 [I,A];
                       A61K0047-48 [I,C*]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                       A61K045/06; A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B2; C12N015/11B5;
                       C12N015/11B7; C12N015/11D; C12N015/11H; C12N015/11M;
                       C12N015/87
US 2005164224
                IPCI
                       C12Q0001-68 [ICM, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
```

```
[I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       435/006.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005070497
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; C12N0015-11
                       [I,A]; C12N0015-11 [I,C*]; C12N0015-87 [I,A];
                       C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4F4; C12N015/11B; C12N015/11B1A;
                       C12N015/11B5; C12N015/11B7; C12N015/11D; C12N015/11H;
                       C12N015/11M; C12N015/87
US 2005176663
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       CO7HO021-02 [I,A]; C12NO015-11 [I,A]; C12NO015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005196765
                IPCI
                       C12Q0001-68 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]; A61K0048-00 [ICS, 7]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                       [I,C*]; C07H0021-02 [I,A]; C12Q0001-68 [I,A];
                       C12Q0001-68 [I,C*]
                NCL
                       435/006.000
US 2005277608
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]
                NCL
                       514/044.000
US 2005182006
                IPCI
                       A61K0048-00 [ICM, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005159378
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005159379
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                IPCR
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
```

```
NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005158735
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005153914
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005164966
                IPCI
                       A61K0048-00 [ICM, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       CO7HO021-02 [I,A]; C12NO015-11 [I,A]; C12NO015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005203040
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005176664
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       514/044.000
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
US 2005176665
                IPCI
                       [ICS, 7]; C07H0021-00 [ICS, 7, C*]
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                IPCR
                       [I,C*]; C07H0021-02 [I,A]; C12Q0001-68 [I,A];
                       C12Q0001-68 [I,C*]
                NCL
                       514/044.000
US 2005233997
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
```

```
[ICS, 7, C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005136436
                IPCI
                       C12Q0001-68 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS,7,C*]; A61K0048-00 [ICS,7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
US 2005153915
                IPCI
                       [ICS, 7, C*]; C12N0015-85 [ICS, 7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
US 2005159380
                IPCI
                       [ICS, 7]; C07H0021-00 [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                       514/044.000
                NCL
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005159382
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       514/044.000
                NCL
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005164967
                IPCI
                       A61K0048-00 [ICM, 7]; C12Q0001-68 [ICS, 7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       514/044.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
                       C07H0021-02 [ICM,7]; C07H0021-00 [ICM,7,C*];
US 2005079610
                IPCI
                       A61K0048-00 [ICS.7]
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                IPCR
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
```

```
[I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       435/375.000
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005153916
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                       514/044.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005159381
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005164968
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005170371
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005176666
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                       [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005176024
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0045-00
                       [I,C*]; A61K0045-06 [I,A]; A61K0047-48 [I,A];
                       A61K0047-48 [I,C*]; C07H0021-00 [I,C*]; C07H0021-02
```

```
[I,A]; C12N0015-11 [I,A]; C12N0015-11 [I,C*];
                       C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K045/06; A61K047/48H4; A61K047/48H4F4; C07H021/02;
                       C12N015/11B; C12N015/11B1A; C12N015/11B2; C12N015/11B5;
                       C12N015/11B7; C12N015/11D; C12N015/11H; C12N015/11M;
                       C12N015/87
US 2005176025
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C12N0015-11 [I,A];
                       C12N0015-11 [I,C*]; C12N0015-87 [I,A]; C12N0015-87
                       [I,C*]
                NCL
                       435/006.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005182007
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS, 7]; C07H0021-00 [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005182008
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0031-7088 [I,A]; A61K0031-7088 [I,C*]; A61K0038-00
                       [N,A]; A61K0038-00 [N,C^*]; A61K0047-48 [I,A];
                       A61K0047-48 [I,C*]; C07H0021-00 [I,C*]; C07H0021-02
                       [I,A]; C12N0015-11 [I,A]; C12N0015-11 [I,C*];
                       C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                ECLA
                       A61K031/7088; A61K047/48H4; A61K047/48H4F4; C07H021/02;
                       C12N015/11B; C12N015/11B1A; C12N015/11B5; C12N015/11B7;
                       C12N015/11D; C12N015/11H; C12N015/11M; C12N015/87
US 2005182009
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                       [ICS, 7, C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       C07H0021-02 [I,A]; C12N0015-11 [I,A]; C12N0015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                       514/044.000
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005187174
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                       [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       CO7HO021-02 [I,A]; C12NO015-11 [I,A]; C12NO015-11
                       [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                       514/044.000
                NCL
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
                       A61K0048-00 [ICM,7]; C12Q0001-70 [ICS,7]; C07H0021-02
US 2005191618
                IPCI
                       [ICS,7]; C07H0021-00 [ICS,7,C*]
```

```
IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                        [I,C*]; C07H0021-02 [I,A]; C12Q0001-70 [I,A];
                       C12Q0001-70 [I,C*]
                        435/005.000
                NCL
US 2005196767
                IPCI
                       C12Q0001-68 [ICM,7]; C07H0021-04 [ICS,7]; C07H0021-00
                        [ICS,7,C*]; A61K0048-00 [ICS,7]
                IPCR
                       A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0047-48
                        [I,A]; A61K0047-48 [I,C*]; C07H0021-00 [I,C*];
                       CO7HO021-02 [I,A]; C12NO015-11 [I,A]; C12NO015-11
                        [I,C*]; C12N0015-87 [I,A]; C12N0015-87 [I,C*]
                NCL
                        435/006.000
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                ECLA
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005227935
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                        [ICS, 7, C*]
                NCL
                        514/044.000
US 2005227936
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                        [ICS, 7, C*]
                        514/044.000
                NCL
US 2005233344
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                        [ICS, 7]; C07H0021-00 [ICS, 7, C*]
                NCL
                        435/006.000
                ECLA
                       A61K047/48H4; A61K047/48H4F4; C07H021/02; C12N015/11B;
                       C12N015/11B1A; C12N015/11B5; C12N015/11B7; C12N015/11D;
                       C12N015/11H; C12N015/11M; C12N015/87
US 2005239731
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                        [ICS, 7, C*]
                NCL
                        514/044.000
US 2005256068
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                        [ICS, 7, C*]
                NCL
                        514/044.000
US 2005267058
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                        [ICS, 7, C*]
                NCL
                        514/044.000
US 2005288242
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                        [ICS, 7, C*]
                NCL
                        514/044.000
US 2005209180
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                        [ICS, 7, C*]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                        [I,C*]; C07H0021-02 [I,A]
                NCL
                        514/044.000
US 2005233998
                IPCI
                       A61K0048-00 [ICM, 7]; C07H0021-02 [ICS, 7]; C07H0021-00
                        [ICS, 7, C*]
                NCL
                        514/044.000
US 2005222066
                IPCI
                       A61K0048-00 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
                        [ICS, 7, C*]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                        [I,C*]; C07H0021-02 [I,A]
                NCL
                        514/044.000
US 2005261219
                IPCI
                       A61K0048-00 [ICM,7]; C12N0015-85 [ICS,7]; C12Q0001-68
                        [ICS, 7]
                NCL
                        514/044.000
US 2005196781
                IPCI
                       A61K0048-00 [ICM,7]; C12Q0001-68 [ICS,7]; C07H0021-02
                        [ICS,7]; C07H0021-00 [ICS,7,C*]
                IPCR
                       A61K0048-00 [I,A]; A61K0048-00 [I,C*]; C07H0021-00
                        [I,C*]; C07H0021-02 [I,A]; C12Q0001-68 [I,A];
                       C12Q0001-68 [I,C*]
                NCL
                        435/006.000
```

US	2006019913	IPCI	A61K0048-00 [I,A]; C07H0021-02 [I,A]; C07H0021-00 [I,C*]
		NCL	
US	2006025361	IPCI	A61K0048-00 [I,A]; C07H0021-04 [I,A]; C07H0021-00 [I,C*]
		NCL	
US	2005287128	IPCI	A61K0048-00 [ICM,7]; C12N0005-08 [ICS,7]; C12N0015-85
			[ICS, 7]
		NCL	424/093.210
US	2005260620	IPCI	C12Q0001-68 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
			[ICS,7,C*]; A61K0048-00 [ICS,7]
		NCL	435/006.000
US	2005277133	IPCI	C12Q0001-68 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00 [ICS,7,C*]
		NCL	435/006.000
US	2005282188	IPCI	C12Q0001-68 [ICM,7]; C07H0021-02 [ICS,7]; C07H0021-00
			[ICS,7,C*]; A61K0048-00 [ICS,7]
		NCL	435/006.000
US	2006019917	IPCI	A61K0048-00 [I,A]; C07H0021-04 [I,A]; C07H0021-02
			[I,A]; C07H0021-00 [I,C*]
		NCL	514/044.000
GI			

AΒ This invention features peptide nucleotide conjugates I wherein each R1-R8 are independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, or a protecting group, each "n" is independently an integer from 0 to about 200, R9 is a straight or branched chain alkyl, substituted alkyl, aryl, or substituted aryl, and R2 is a phosphorus containing group, nucleoside, nucleotide, small mol., nucleic acid, or a solid support comprising a linker., degradable linkers, compns., methods of synthesis, and applications thereof, including folate, galactose, galactosamine, N-acetyl galactosamine, PEG, phospholipid, peptide and human serum albumin (HAS) derived conjugates of biol. active compds., including antibodies, antivirals, chemotherapeutics, peptides, proteins, hormones nucleosides, nucleotides, non-nucleosides, and nucleic acids including enzymic nucleic acids, DNAzymes, allozymes, antisense, dsRNA, siRNA, triplex oligonucleotides, 2,5-A chimeras, decoys and aptamers. Thus, 1-0-(4-monomethoxytrityl)-N-(12'-hydroxydodecanoyl-2-acetamido-3,4,6-tri-0acetyl-2-deoxy-3-D-galactopyranose)-D-threoninol 3-0-(2-cyanoethyl, N, Ndiisopropylphosphorami-dite) was prepared and incorporated into RNA. A method of treating a cancer patient, comprising contacting cells of patient wherein said cancer is breast cancer, lung cancer, colorectal cancer, brain cancer, esophageal cancer, stomach cancer, bladder cancer, pancreatic cancer, cervical cancer, head and neck cancer, ovarian cancer, melanoma, lymphoma, glioma, or multidrug resistant cancers and/or viral

infections including HIV, HBV, HCV, CMV, RSV, HSV, poliovirus, influenza, rhinovirus, west nile virus, Ebola virus, foot and mouth virus, and papilloma.

ST antitumor multidrug resistant nucleotide RNA enzyme prepn; hormone nucleoside nucleotide RNA enzyme antisense prepn antiviral glycophospholipid; antibody enzymic oligoribonucleotide peptide prepn antiviral hammerhead enzyme antisense; enzymic ribonucleic acid peptide prepn antiviral triplex oligoribonucleotide human

IT Quaternary structure

(DNA triplex; preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery)

IT Uterus, neoplasm

(cervix; preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery)

IT Nucleic acids

RL: BSU (Biological study, unclassified); BIOL (Biological study) (enzymic-hammerhead, inozyme, DNAzyme, G-cleaver, zinzyme, amberzyme and allozyme; preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery)

IT Albumins, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (human serum; preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery)

IT Antitumor agents

Antiviral agents

Brain

Brain, neoplasm

Cytomegalovirus

Ebola virus

Foot-and-mouth disease virus

Head and Neck

Head and Neck

Hepatitis B virus

Hepatitis C virus

Human

Human immunodeficiency virus

Human poliovirus

Influenza

Lung

Lung, neoplasm

Lymphoma

Mammary gland

Mammary gland, neoplasm

Melanoma

Multidrug resistance

Neoplasm

Neuroglia, neoplasm

Ovary, neoplasm

Pancreas

Pancreas, neoplasm

Papilloma

Papillomavirus

Rhinovirus

Rous sarcoma virus

Stomach

West Nile virus

(preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery)

IT Enzymes, biological studies
 Glycophospholipids

```
Hormones, animal, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (preparation of enzymic RNA peptide conjugates as antitumor and antiviral
        agents and compns. for cellular delivery)
IT
     Glycopeptides
     Nucleotides, preparation
     RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of enzymic RNA peptide conjugates as antitumor and antiviral
        agents and compns. for cellular delivery)
ΙT
     Double stranded RNA
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of enzymic RNA peptide conjugates as antitumor and antiviral
        agents and compns. for cellular delivery)
IΤ
     Infection
        (viral; preparation of enzymic RNA peptide conjugates as antitumor and
        antiviral agents and compns. for cellular delivery)
IT
                5536-17-4
                           21679-14-1, Fludarabine
                                                      29984-33-6
     AZT
           36791-04-5, Ribavirin
                                 39809-25-1, Penciclovir
                                                             59277-89-3,
                69123-98-4, Fialuridine
                                          82410-32-0, Ganciclovir
     104227-87-4, Famciclovir
                               114987-19-8, Cytallene 121154-51-6
                                                        142217-69-4, BMS 200475
     127759-89-1, Lobucavir 134678-17-4, Lamivudine
     142340-99-6
                  143491-54-7, FTC
                                     147058-39-7
                                                   163252-36-6, L-FMAU
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (preparation of enzymic RNA peptide conjugates as antitumor and antiviral
        agents and compns. for cellular delivery)
IΤ
     100-66-3, Anisole, reactions
                                   150-13-0
                                               524-38-9, N-Hydroxyphthalimide
                                       2592-95-2, 1-Hydroxybenzotriazole
               1811-31-0
                           2127-03-9
     14470-28-1, p-Anisylchlorodiphenylmethane
                                                 30453-21-5D, enzymic nucleic
                   84793-07-7
                                 88574-06-5
                                             109581-83-1
                                                          133906-29-3
     acid derivs.
     173209-23-9
                  252847-30-6
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of enzymic RNA peptide conjugates as antitumor and antiviral
        agents and compns. for cellular delivery)
ΙT
     10385-50-9P
                  99837-97-5P 141925-93-1P
                                              449807-11-8P
                                                               449807-12-9P
     449807-13-0P
                   449807-14-1P
                                   449807-15-2P
                                                  449807-17-4P
                                                                 449807-19-6P
     449807-20-9P
                   449807-21-0P
                                   449807-22-1P
                                                  449807-24-3P
                                                                 449807-25-4P
     449807-26-5P
                   475575-52-1P
                                   475575-53-2P
                                                  475575-54-3P
                                                                 475575-55-4P
     475575-56-5DP, enzymic nucleic acid derivs.
                                                  475575-57-6P
                                                                  475575-58-7P
                   475575-60-1P
     475575-59-8P
                                 475575-61-2P
                                                                 475575-85-0P
                                                  475575-62-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of enzymic RNA peptide conjugates as antitumor and antiviral
        agents and compns. for cellular delivery)
                  477694-13-6
ΙT
     477694-12-5
                                 477694-14-7
                                               477694-15-8
                                                             477694-16-9
                                 477694-19-2
     477694-17-0
                  477694-18-1
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; preparation of enzymic RNA peptide
        conjugates as antitumor and antiviral agents and compns. for cellular
        delivery)
ΙT
     123251-89-8
                  143189-32-6
                                 161007-71-2
                                               188842-14-0
                                                             199792-56-8
     213546-53-3
                                 395069-93-9
                  220337-28-0
                                               477586-11-1
                                                             477586-12-2
     477586-13-3
                  477586-14-4
     RL: PRP (Properties)
        (unclaimed sequence; preparation of enzymic RNA peptide conjugates as
        antitumor and antiviral agents and compns. for cellular delivery)
ΙT
     121154-51-6
```

RL: BSU (Biological study, unclassified); BIOL (Biological study) (preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery) RN 121154-51-6 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

```
ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
     2001:617821 HCAPLUS
ΑN
     135:175348
DN
ED
     Entered STN: 24 Aug 2001
     Use of N-substituted-1,5-dideoxy-1,5-imino-D-glucitol compounds for
     treating hepatitis virus infections
ΙN
     Mueller, Richard A.; Bryant, Martin L.
PΑ
     Pharmacia Corporation, USA
SO
     PCT Int. Appl., 116 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K0031-445
     ICS A61P0031-14
     1-5 (Pharmacology)
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                  DATE
                                            -----
PΙ
     WO 2001060366
                         A1
                                20010823
                                            WO 2001-US4512
                                                                   20010213 <--
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 2001036938
                                20010827
                                          AU 2001-36938
                         Α5
                                                                   20010213 <--
     EP 1261339
                                20021204
                                           EP 2001-909153
                                                                   20010213 <--
                         Α1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2003522791
                          T2
                                20030729
                                            JP 2001-559463
                                                                   20010213 <--
     US 2005119310
                                20050602
                                            US 2002-203769
                                                                   20010213 <--
                          Α1
PRAI US 2000-182362P
                          Ρ
                                20000214
                                          <--
     WO 2001-US4512
                          W
                                20010213
                                          <--
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
 WO 2001060366
                ICM
                        A61K0031-445
                 ICS
                        A61P0031-14
```

```
IPCI
                        A61K0031-445 [ICM, 7]; A61P0031-14 [ICS, 7]; A61P0031-00
                        [ICS, 7, C*]
                 IPCR
                        A61K0031-445 [I,A]; A61K0031-445 [I,C*]; A61K0045-00
                        [I,C*]; A61K0045-06 [I,A]
                 ECLA
                        A61K031/445; A61K045/06
 AU 2001036938
                 IPCI
                        A61K0031-445 [ICM,7]; A61P0031-14 [ICS,7]; A61P0031-00
                        [ICS, 7, C*]
                 IPCR
                        A61K0031-445 [I,A]; A61K0031-445 [I,C*]; A61K0045-00
                        [I,C*]; A61K0045-06 [I,A]
 EP 1261339
                 IPCI
                        A61K0031-445 [ICM, 6]; A61P0031-14 [ICS, 6]; A61P0031-00
                        [ICS, 6, C*]
                 IPCR
                        A61K0031-445 [I,A]; A61K0031-445 [I,C*]; A61K0045-00
                        [I,C*]; A61K0045-06 [I,A]
 JP 2003522791
                 IPCI
                        A61K0031-445 [ICM,7]; A61P0001-16 [ICS,7]; A61P0001-00
                        [ICS,7,C*]; A61P0031-20 [ICS,7]; A61P0031-00
                        [ICS,7,C*]; C07D0211-46 [ICS,7]; C07D0211-00 [ICS,7,C*]
                 IPCR
                        A61K0031-445 [I,A]; A61K0031-445 [I,C*]; A61K0045-00
                        [I,C*]; A61K0045-06 [I,A]
 US 2005119310
                 IPCI
                        A61K0031-445 [ICM, 7]
                        514/328.000
                 NCL
     Provided are methods and compns. for treating hepatitis virus infections
     in mammals, especially humans. The methods comprise (1) administering
     N-substituted-1,5-dideoxy-1,5-imino-D-glucitol compds. alone or in
     combination with nucleoside antiviral agents, nucleotide antiviral agents,
     mixts. thereof, or immunomodulating/immunostimulating agents, or (2)
     administering N-substituted-1,5-dideoxy-1,5-imino-D-glucitol compds. alone
     or in combination with nucleoside antiviral agents, nucleotide antiviral
     agents, or mixts. thereof, and immunomodulating/immuno stimulating agents.
ST
     hepatitis virus iminoglucitol deriv nucleoside nucleotide; immunomodulator
     antiviral hepatitis virus iminoglucitol deriv
TΤ
     Hepatitis
        (B; treatment of hepatitis B and C virus infections with
        dideoxyiminoglucitols and antiviral nucleosides and nucleotides)
ΙT
     Hepatitis
        (C; treatment of hepatitis B and C virus infections
        with dideoxyiminoglucitols and antiviral nucleosides and nucleotides)
IT
     Antiviral agents
     Hepatitis B virus
      Hepatitis C virus
     Immunomodulators
     Immunostimulants
        (treatment of hepatitis B and C virus infections with
        dideoxyiminoglucitols and antiviral nucleosides and nucleotides)
IT
                           5536-17-4, Ara-A 7481-89-2, Dideoxycytidine
     3056-17-5, Stavudine
                                       30516-87-1, 3'-Azido-3'-deoxythymidine
                  29984-33-6, Ara-AMP
     25526-93-6
     36791-04-5, 1-\beta-D-Ribofuranosyl-1,2,4-triazole-3-carboxamide
     39809-25-1, Penciclovir
                              59277-89-3, Acyclovir 66341-18-2, Acyclovir
                  69123-90-6, FIAC
                                      69123-98-4, FIAU
                                                          69256-17-3, FMAU
     triphosphate
     69655-05-6, Dideoxyinosine
                                  72458-45-8
                                               72458-46-9
                                                            73243-67-1
                 79206-10-3
                               79206-12-5
                                            79206-14-7
                                                         79206-20-5
     77222-61-8
     79206-22-7
                  79570-63-1
                               81117-35-3
                                            81117-36-4
                                                         81117-38-6
     82410-32-0, Ganciclovir
                               85326-06-3
                                            87190-81-6
                                                         104227-87-4,
                                       111687-37-7, D-Carbocyclic-2'-
                  106941-25-7, PMEA
     Famciclovir
                      115183-38-5
                                   115249-95-1 121154-51-6
     deoxyguanosine
                                                                  137530-41-7
     128985-11-5 131167-83-4
                                 134678-17-4, 3TC
                                                    134680-32-3
                                      143616-58-4
                        143491-57-0
                                                    147058-39-7
     143491-54-7, FTC
                                                                  160632-03-1
                                               211987-28-9
     160632-05-3
                  162398-48-3
                                 162398-56-3
                                                             211987-29-0
                                 211987-32-5
     211987-30-3
                  211987-31-4
                                               211987-33-6
                                                             211987-34-7
     211987-35-8
                  211987-36-9
                                 211987-37-0
                                               211987-38-1
                                                             211987-39-2
     211987-40-5 211987-41-6
                                 211987-42-7
                                               211987-43-8
                                                             211987-44-9
```

211987-45-0 211987-46-1 211987-47-2 211987-48-3 211987-49-4 211987-51-8 211987-52-9 211987-50-7 211987-53-0 211987-54-1 211987-55-2 211987-56-3 211987-57-4 211987-58-5 211987-59-6 211987-60-9 211987-61-0 211987-62-1 223771-90-2 223772-09-6 238075-04-2 238075-05-3 238075-06-4 238075-07-5 238075-08-6 238075-09-7 238075-10-0 238075-11-1 238075-12-2 238075-13-3 238075-14-4 238075-15-5 238075-16-6 238075-17-7 238075-18-8 238075-19-9 238075-20-2 238075-21-3 238075-22-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of hepatitis B and C virus infections with dideoxyiminoglucitols and antiviral nucleosides and nucleotides)

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Block, T; NATURE MEDICINE 1998, V4(5), P610 HCAPLUS
- (2) Block, T; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA 1994, V91(6), P2235 HCAPLUS
- (3) Dwek, R; WO 9835685 A 1998 HCAPLUS
- (4) Mueller, R; WO 9940916 A 1999 HCAPLUS
- (5) Mueller, R; WO 0047198 A 2000 HCAPLUS
- (6) Platt, F; CHEMTRACTS ORGANIC CHEMISTRY 1994, P106
- (7) Searle & Co; WO 9519172 A 1995 HCAPLUS
- (8) Zitzmann, N; WO 9929321 A 1999 HCAPLUS
- (9) Zitzmann, N; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA 1999, V96(21), P11878 HCAPLUS
- IT 121154-51-6

RE.CNT

RF.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of hepatitis B and C virus infections with dideoxyiminoglucitols and antiviral nucleosides and nucleotides)

RN 121154-51-6 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:14:24 ON 27 JUN 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 JUN 2006 HIGHEST RN 889573-50-6 DICTIONARY FILE UPDATES: 26 JUN 2006 HIGHEST RN 889573-50-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> => d ide can 116

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN **147058-39-7** REGISTRY Entered STN: 20 Apr 1993 ΕD 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl) -2-furanyl] - (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[tetrahydro-5-(hydroxymethyl)-2furanyl]-, (2S-cis)-OTHER NAMES: β -L-2',3'-Dideoxy-5-fluorocytidine STEREOSEARCH DR 174541-05-0 MF C9 H12 F N3 O3 SR LC BEILSTEIN*, BIOSIS, CA, CAPLUS, IMSDRUGNEWS, IMSRESEARCH, MEDLINE, PROUSDDR, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 58 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 58 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:488682

REFERENCE 142:170033 2:

REFERENCE 141:400969 3:

REFERENCE 141:325184 4:

REFERENCE 5: 141:225774

REFERENCE 140:157421 6:

REFERENCE 7: 138:14152

8: REFERENCE 137:333119

REFERENCE 9: 136:144693

REFERENCE 10: 136:47974

=> d ide can 117 tot

L17 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

656799-05-2 REGISTRY

ED Entered STN: 02 Mar 2004

CN Triphosphoric acid, P-[(2R,5S)-5-(3,4-dihydro-2,4-dioxo-1(2H)pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with N, N-diethylethanamine (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C9 H15 N2 O13 P3 . x C6 H15 N

SR

LCSTN Files: CA, CAPLUS, USPATFULL

> CM 1

CRN 656799-04-1

CMF C9 H15 N2 O13 P3

Absolute stereochemistry.

From appliants:

CM 2 CRN 121-44-8 CMF C6 H15 N

Et | Et-N-Et

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

L17 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **656799-03-0** REGISTRY

ED Entered STN: 02 Mar 2004

CN Triphosphoric acid, P-[[(2R,5S)-5-(5-fluoro-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C9 H14 F N2 O13 P3 . \times C6 H15 N

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 656799-02-9 CMF C9 H14 F N2 O13 P3

Absolute stereochemistry.

CM 2

CRN 121-44-8 CMF C6 H15 N

Et | Et-N-Et

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

```
L17 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN
RN
    656799-01-8 REGISTRY
ED
    Entered STN: 02 Mar 2004
    Triphosphoric acid, P-[(2R,5S)-5-(4-amino-2-oxo-1(2H)-
CN
    pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with
    N, N-diethylethanamine (9CI) (CA INDEX NAME)
FS
    STEREOSEARCH
    C9 H16 N3 O12 P3 . x C6 H15 N
MF
SR
    STN Files:
LC
                 CA, CAPLUS, USPATFULL
    CM
         1
```

Absolute stereochemistry.

CRN 161170-30-5 CMF C9 H16 N3 O12 P3

CM 2

CRN 121-44-8 CMF C6 H15 N

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

CRN 161170-31-6

CMF C9 H15 F N3 O12 P3

L17 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN **656799-00-7** REGISTRY RN Entered STN: 02 Mar 2004 ED Triphosphoric acid, P-[[(2R,5S)-5-(4-amino-5-fluoro-2-oxo-1(2H)-fluoro-2-oxo-1)]CN pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with N, N-diethylethanamine (9CI) (CA INDEX NAME) FS STEREOSEARCH C9 H15 F N3 O12 P3 . \times C6 H15 N MF SR LC STN Files: CA, CAPLUS, USPATFULL CM 1

Absolute stereochemistry.

CM 2

CRN 121-44-8 CMF C6 H15 N

Et | | Et-N-Et

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

L17 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **656798-99-1** REGISTRY

ED Entered STN: 02 Mar 2004

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S,5R)-5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-5-fluoro-(9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C25 H29 F N2 O4 Si

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

L17 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **189818-67-5** REGISTRY

ED Entered STN: 13 Jun 1997

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-5-fluoro-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2(1H)-Pyrimidinone, 4-amino-1-[5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-5-fluoro-, (2S-cis)-

FS STEREOSEARCH

MF C25 H30 F N3 O3 Si

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)

4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 2: 128:308706

REFERENCE 3: 128:75639

REFERENCE 4: 126:343801

L17 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **169527-97-3** REGISTRY

ED Entered STN: 02 Nov 1995

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S,5R)-5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,4(1H,3H)-Pyrimidinedione, 1-[5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-, (2S-cis)-

FS STEREOSEARCH

MF C25 H30 N2 O4 Si

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 2: 123:286530

L17 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **161170-31-6** REGISTRY

ED Entered STN: 02 Mar 1995

CN Triphosphoric acid, P-[(2R,5S)-[5-(4-amino-5-fluoro-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Triphosphoric acid, P-[[5-(4-amino-5-fluoro-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, (2R-cis)-

FS STEREOSEARCH

MF C9 H15 F N3 O12 P3

CI COM

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)

8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 2: 132:329401

REFERENCE 3: 129:103801

REFERENCE 4: 126:139863

REFERENCE 5: 126:69690

REFERENCE 6: 124:306640

REFERENCE 7: 124:215

REFERENCE 8: 122:154909

L17 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **160963-16-6** REGISTRY

ED Entered STN: 21 Feb 1995

CN 2(1H)-Pyrimidinone, 4-amino-5-iodo-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2(1H)-Pyrimidinone, 4-amino-5-iodo-1-[tetrahydro-5-(hydroxymethyl)-2-furanyl]-, (2S-cis)-

FS STEREOSEARCH

MF C9 H12 I N3 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 2: 122:123093

L17 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN 160963-15-5 REGISTRY

ED Entered STN: 21 Feb 1995

CN 2(1H)-Pyrimidinone, 4-amino-5-chloro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2(1H)-Pyrimidinone, 4-amino-5-chloro-1-[tetrahydro-5-(hydroxymethyl)-2-furanyl]-, (2S-cis)-

FS STEREOSEARCH

MF C9 H12 C1 N3 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:325184

REFERENCE 2: 140:157421

REFERENCE 3: 136:47974

REFERENCE 4: 133:83920

REFERENCE 5: 122:123093

L17 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **153547-98-9** REGISTRY

ED Entered STN: 10 Mar 1994

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,4(1H,3H)-Pyrimidinedione, 1-[tetrahydro-5-(hydroxymethyl)-2-furanyl]-, (2S-cis)-

OTHER NAMES:

CN β -L-2',3'-Dideoxyuridine

FS STEREOSEARCH

MF C9 H12 N2 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1907 TO DATE)

11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 135:167014 2:

REFERENCE 132:132349 3:

REFERENCE 126:343812 4:

REFERENCE 5: 126:104343

REFERENCE 6: 125:115093

REFERENCE 7: 125:108579

REFERENCE 8: 123:286530

REFERENCE 9: 122:282253

REFERENCE 10: 122:123093

L17 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN 153547-97-8 REGISTRY

ΕD Entered STN: 10 Mar 1994

2,4(1H,3H)-Pyrimidinedione, 5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

2,4(1H,3H)-Pyrimidinedione, 5-fluoro-1-[tetrahydro-5-(hydroxymethyl)-2furanyl]-, (2S-cis)-

FS STEREOSEARCH

MF C9 H11 F N2 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 2: 123:286530

REFERENCE 3: 120:182418

ANSWER 13 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN L17

128112-71-0 REGISTRY RN

ED Entered STN: 13 Jul 1990

CN 2(1H) -Pyrimidinone, 4-amino-1-[(2S, 5R)-5-[[[(1,1dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2(1H)-Pyrimidinone, 4-amino-1-[5-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-, (2S-cis)-

FS STEREOSEARCH

MF C25 H31 N3 O3 Si

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 2: 113:41231

L17 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN **121154-51-6** REGISTRY

ED Entered STN: 16 Jun 1989

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2(1H)-Pyrimidinone, 4-amino-1-[tetrahydro-5-(hydroxymethyl)-2-furanyl]-, (2S-cis)-

OTHER NAMES:

CN β -L-2',3'-Dideoxycytidine

CN 36: PN: DE102004051804 PAGE: 22 claimed sequence

CN L-DdC

FS STEREOSEARCH

MF C9 H13 N3 O3

SR CA

LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER, USPATFULL

(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 51 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 51 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:425654

REFERENCE 2: 143:194107

REFERENCE 3: 141:325184

REFERENCE 4: 140:157421

REFERENCE 5: 138:14152

REFERENCE 6: 137:29517

REFERENCE 7: 136:397775

REFERENCE 8: 136:355410

REFERENCE 9: 136:47974

REFERENCE 10: 135:205124

L17 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2006 ACS on STN

RN 107036-57-7 REGISTRY

ED Entered STN: 14 Mar 1987

CN Cytidine, 5-bromo-2', 3'-dideoxy- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2',3'-Dideoxy-5-bromocytidine

CN 5-Bromo-2',3'-dideoxycytidine

FS STEREOSEARCH

MF C9 H12 Br N3 O3

SR CA

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL (*File contains numerically searchable property data)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)

8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:157421

REFERENCE 2: 122:123093

REFERENCE 3: 113:17495

REFERENCE 4: 112:36348

REFERENCE 5: 112:18094

REFERENCE 6: 111:58275

REFERENCE 7: 108:269

REFERENCE 8: 106:156808

=>

=> fil reg FILE 'REGISTRY' ENTERED AT 08:37:29 ON 28 JUN 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 JUN 2006 HIGHEST RN 889765-67-7 DICTIONARY FILE UPDATES: 27 JUN 2006 HIGHEST RN 889765-67-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

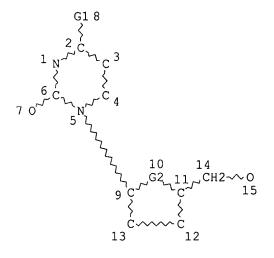
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d sta que 15 L1 STR



VAR G1=N/O

```
VAR G2=O/S/N/C
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 12
CONNECT IS E2 RC AT 13
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:

RSPEC 9 5

NUMBER OF NODES IS 15

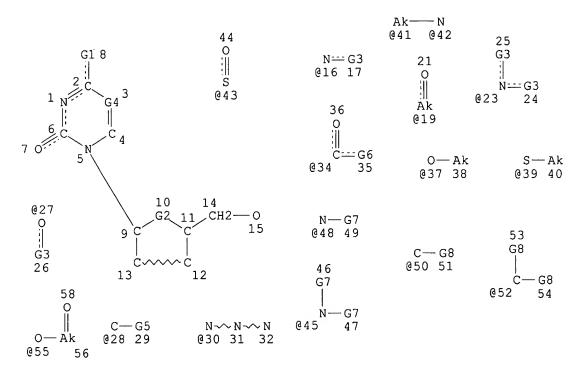
STEREO ATTRIBUTES: NONE

L2

3169 SEA FILE=REGISTRY SSS FUL L1

L3 STR

0-Si @59 60



VAR G1=N/16/23/O/27
VAR G2=O/S/43/SO2/N/48/45/C/50/52
VAR G3=AK/CB/19
VAR G4=C/28
VAR G5=X/AK/CN/CF3/30/NO2/CY/CHO/34
VAR G6=O/S/AK/41/42/37/39
VAR G7=AK/CB
VAR G8=X/OH/37/55/59
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 15
CONNECT IS M1 RC AT 60
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC 5 9

NUMBER OF NODES IS 55

STEREO ATTRIBUTES: NONE

L5 1913 SEA FILE=REGISTRY SUB=L2 CSS FUL L3

100.0% PROCESSED 3103 ITERATIONS 1913 ANSWERS

SEARCH TIME: 00.00.01

=> d ide can 117

- L17 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 9026-28-2 REGISTRY
- ED Entered STN: 16 Nov 1984
- CN Nucleotidyltransferase, ribonucleate, RNA-dependent (9CI) (CA INDEX NAME)

OTHER NAMES:

- CN 3D Polymerase
- CN E.C. 2.7.7.48
- CN Gene PB2 polymerase
- CN Hepatitis C virus polymerase
- CN Hepatitis C virus polymerase NS5B
- CN NS5B polymerase
- CN NS5B RNA-dependent RNA polymerase
- CN PB1 polymerase
- CN PB1 proteins
- CN PB2 polymerase
- CN PB2 proteins
- CN Phage f2 replicase
- CN Polymerase L
- CN Proteins, $\lambda 3$, of reovirus
- CN Proteins, PB 2
- CN Proteins, PB1
- CN Q-Beta replicase
- CN $Q\beta$ -replicase
- CN Replicase, phage f2
- CN Replicase, Qβ-
- CN Ribonucleic acid replicase
- CN Ribonucleic acid-dependent ribonucleate nucleotidyltransferase
- CN Ribonucleic acid-dependent ribonucleic acid polymerase
- CN Ribonucleic replicase
- CN Ribonucleic synthetase
- CN RNA replicase
- CN RNA synthetase
- CN RNA transcriptase
- CN RNA-dependent ribonucleate nucleotidyltransferase
- CN RNA-dependent RNA polymerase
- CN RNA-dependent RNA polymerase NS5B
- CN RNA-dependent RNA replicase
- CN RNA-directed RNA polymerase
- CN Transcriptase
- MF Unspecified
- CI MAN
- LC STN Files: ADISNEWS, AGRICOLA, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CIN, EMBASE, PROMT, TOXCENTER, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

^{**}PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

3603 REFERENCES IN FILE CA (1907 TO DATE)

```
38 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            3617 REFERENCES IN FILE CAPLUS (1907 TO DATE)
REFERENCE
            1: 145:4051
REFERENCE
            2: 145:1919
REFERENCE
               145:1750
            3:
REFERENCE
            4:
               145:1575
REFERENCE
            5:
               144:487147
REFERENCE
            6: 144:484776
REFERENCE
            7: 144:484443
REFERENCE
            8: 144:484408
REFERENCE
            9: 144:483276
REFERENCE 10: 144:483256
=> d his
     (FILE 'HOME' ENTERED AT 07:50:33 ON 28 JUN 2006)
                SET COST OFF
     FILE 'REGISTRY' ENTERED AT 07:51:12 ON 28 JUN 2006
               ACT KHARE632B/A
L1
                STR
L2
           3169 SEA FILE=REGISTRY SSS FUL L1
L3
                STR L1
L4
             50 S L3 CSS SAM SUB=L2
L5
           1913 S L3 CSS FUL SUB=L2
                SAV TEMP L5 KHARE632C/A
     FILE 'HCAPLUS' ENTERED AT 08:20:11 ON 28 JUN 2006
L6
           4074 S L5
L7
             48 S L6 AND HCV
L8
             79 S L6 AND HEPATITIS C VIRUS
L9
             95 S L6 AND HEPATITIS C
                E HEPATITIS C/CT
                E E3+ALL
L10
           6197 S E2,E3
                E E5+ALL
                E HEPATITIS C/CT
L11
             98 S E10-E27
                E E5+ALL
L12
          11424 S E8+OLD, NT
                E E7+ALL
L13
           9777 S E7+NT
               E HEPATITIS C/CT
L14
             88 S L6 AND L10-L13
L15
            95 S L7-L9, L14
L16
            98 S HCV POLYMERASE
```

```
FILE 'REGISTRY' ENTERED AT 08:26:13 ON 28 JUN 2006
1.17
              1 S 9026-28-2
     FILE 'HCAPLUS' ENTERED AT 08:26:26 ON 28 JUN 2006
L18
           3617 S L17
L19
             16 S L6 AND L16, L18
L20
              7 S L6 AND RNA DEPENDENT RNA POLYMERASE
L21
              0 S L6 AND NS5B POLYMERASE
L22
            504 S L6 AND POLYMERASE
L23
             18 S L22 AND L15
L24
            101 S L15, L19, L23
L25
             62 S L24 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
L26
             53 S L5 (L) (THU OR PAC OR PKT OR DMA)/RL AND L25
L27
             56 S L24 AND (PD<=20020801 OR PRD<=20020801 OR AD<=20020801)
L28
             47 S L26 AND L27
L29
              9 S L27 NOT L28
                SEL AN 5 6 8
L30
              3 S L29 AND E1-E6
L31
             47 S L28 AND HEPATITIS
L32
              2 S L24 AND (SCHINAZI ? OR STRIKER ? OR SHI J?)/AU
L33
              3 S L24 AND PHARMASSET?/PA,CS
L34
              4 S L32, L33
L35
              3 S L34 NOT 140:157421/DN
L36
             51 S L30, L31, L35 AND L6-L16, L18-L35
L37
             50 S L36 NOT 140:157421/DN
```

FILE 'REGISTRY' ENTERED AT 08:37:29 ON 28 JUN 2006

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 08:37:44 ON 28 JUN 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 28 Jun 2006 VOL 145 ISS 1 FILE LAST UPDATED: 27 Jun 2006 (20060627/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 137 bib abs hitstr retable tot

L37 ANSWER 1 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:238670 HCAPLUS

DN 142:303644

TI Compositions comprising phosphatidylethanolamine-binding peptides linked

to anti-viral agents

IN Thorpe, Philip E.; Soares, M. Melina; He, Jin

PA USA

SO U.S. Pat. Appl. Publ., 182 pp., Cont.-in-part of U.S. Ser. No. 621,269. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 17

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		-			
PΙ	US 2005059578	A1	20050317	US 2003-642121	20030815 < \/
	US 2004170620	A1	20040902	US 2003-621269	20030715 < 💢
PRAI	US 2002-396263P	P	20020715	<	,
	US 2003-621269	A2	20030715		

AΒ Disclosed are surprising discoveries concerning the role of anionic phospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases. The pharmaceutical compns. and treatment methods of the invention employ "therapeutically effective amts." of an anti-aminophospholipid or anti-anionic phospholipid antibody, optionally one that binds to substantially the same epitope as the monoclonal antibody 9D2 or 3G4, or an antigen binding fragment or immunoconjugate of such an antibody, or a substantially cell impermeant PE-binding peptide derivative, preferably a substantially cell impermeant duramycin derivative, or an anti-viral conjugate thereof.

IT 3056-17-5, Stavudine 7481-89-2, Zalcitabine

RL: BSU (Biological study, unclassified); THU (Therapeutic use);

BIOL (Biological study); USES (Uses)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Absolute stereochemistry. Rotation (+).

```
ANSWER 2 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
     2005:177803 HCAPLUS
DN
     142:254560
TI
     Antimetabolite antiviral dosing regimen for hepatitis C
     virus or flaviviridae therapy
     Stuyver, Lieven J.
ΙN
PΑ
     Pharmasset, Inc., USA
     PCT Int. Appl., 61 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
                         ____
                                            WO 2004-US26686
PΙ
     WO 2005018330
                         A1
                                20050303
                                                                    20040817
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRAI US 2003-496202P
                          Ρ
                                20030818
     An anti-hepatitis C agent which is an anti-metabolite
     to the host and cannot be administered on a daily or chronic basis as is
     usual in anti-viral therapy (referred to below as an "anti-HCV
     anti-metabolite"), can be administered using a traditional anti-cancer
     dosing regimen (for example via i.v. or parenteral injection), over a
    period of 1-7 days followed by cessation of therapy until rebound of the
     viral load is noted. This dosing regimen runs counter to conventional
     antiviral experience, wherein effective agents are usually administered
     over at least fourteen days of sustained therapy, and typically on an
     indefinite daily basis.
     7481-89-2, Zalcitabine
ΙT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (antimetabolite antiviral dosing regimen for hepatitis
        C virus or flaviviridae therapy)
     7481-89-2 HCAPLUS
RN
CN
     Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)
```

IT 9026-28-2, RNA dependent RNA polymerase

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors, combination; antimetabolite antiviral dosing regimen for hepatitis C virus or flaviviridae therapy)

RN 9026-28-2 HCAPLUS

CN Nucleotidyltransferase, ribonucleate, RNA-dependent (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RETABLE

Referenced Author	Year VOL PG	, ,	Referenced
(RAU)	(RPY) (RVL) (RPG)		File
Frustaci Sato		-+====================================	

L37 ANSWER 3 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:98834 HCAPLUS

DN 142:196516

- TI Anti-phosphatidylserine antibodies and antibody-antiviral agent conjugates for treating cancer and viral infection
- IN Thorpe, Philip E.; Soares, M. Melina; He, Jin
- PA Board of Regents, the University of Texas System, USA
- SO U.S. Pat. Appl. Publ., 180 pp., Cont.-in-part of U.S. Ser. No. 621,269. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 17

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2005025761	A1	20050203	US 2003-642100	20030815 <
	US 2004170620	A1	20040902	US 2003-621269	20030715 <
PRAI	US 2002-396263P	P	20020715 <		
	US 2003-621269	A2	20030715		

- AB Disclosed are surprising discoveries concerning the role of anionic phospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases. E.g. anti--phosphatidylserine antibody 3G4 and scFv 3A2 and 9D2 and their humanized derivs. were prepared for treatment of cancer and viral infection.
- IT 3056-17-5, Stavudine 7481-89-2, Zalcitabine

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-phosphatidylserine antibodies and antibody-antiviral agent conjugates for treating cancer and viral infection)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L37 ANSWER 4 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:905361 HCAPLUS

DN 141:388642

TI Methods for treating tumors and viral infections by using antibodies, immunoconjugates and duramycin-based compounds to inhibit anionic phospholipids and aminophospholipids

IN Thorpe, Philip E.; Soares, M. Melina; Ran, Sophia

PA USA

SO U.S. Pat. Appl. Publ., 181 pp., Cont.-in-part of U.S. Ser. No. 621,269. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 17

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2004213779	A1	20041028	US 2003-642119	20030815 <
	US 2004170620	A1	20040902	US 2003-621269	20030715 <
PRAI	US 2002-396263P	P	20020715	<	12
	US 2003-621269	A2	20030715		

AB Disclosed are surprising discoveries concerning the role of anionic phospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases.

IT 3056-17-5, Stavudine 7481-89-2, Zalcitabine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treating tumors and viral infections by using antibodies,

immunoconjugates and duramycin-based compds. to inhibit anionic phospholipids and aminophospholipids)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L37 ANSWER 5 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:490275 HCAPLUS

DN 141:59691

TI Systemic delivery of antiviral agents

IN Ashton, Paul; Chen, Jianbing; Smith, Thomas J.

PA Control Delivery Systems, Inc., USA

SO U.S. Pat. Appl. Publ., 37 pp., Cont.-in-part of U.S. Ser. No. 96,877. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 14

2 7 7 7 7	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2004115268	A1	20040617	US 2003-713336	20031113 <
	US 6375972	В1	20020423	US 2000-558207	20000426 <
	US 2002102307 `	A1	20020801	US 2002-96877	20020314 <
	US 2005186279	A1	20050825	US 2005-81142	20050315 <
PRAI	US 2000-558207	A1	20000426	<- -	
	US 2002-96877	A2	20020314	<	
	US 2002-425943P	P	20021113	<	

AB The systems and methods disclosed herein provide sustained delivery of a therapeutic agent for treating a patient, e.g., human, to obtain a desired local or systemic physiol. or pharmacol. effect. Method includes positioning the sustained released drug delivery system at an area wherein release of the agent is desired and allowing the agent to pass through the device to the desired area of treatment. In some embodiments, the method is for treating or reducing the risk of retroviral or lentiviral

infection. In certain embodiments, the method is for preventing or reducing the risk of mother-to-child transmission of HIV, wherein the therapeutic agent is an antiviral agent.

IT **3416-05-5**, 2',3'-Dideoxythymidine **7481-89-2**, Zalcitabine RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (systemic delivery of antiviral agents)

3416-05-5 HCAPLUS RN

CN Thymidine, 3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

7481-89-2 HCAPLUS RN Cytidine, 2',3'-dideoxy- (8CI, 9CI) CN (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 6 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN L37

AN 2004:60253 HCAPLUS

DN 140:127195

TΙ Antibodies specifically bind to anionic phospholipids and/or aminophospholipids conjugated with duramycin peptide for treating viral infections and cancer

IN Thorpe, Philip E.; Soares, Melina M.; Huang, Xianming; He, Jin; Ran, Sophia

PΑ Board of Regents the University of Texas System, USA

SO PCT Int. Appl., 378 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.	CNT	17																		
	PATENT NO.						D	DATE			APPLICATION NO.						DATE			
ΡI	WO 2004006847				A2	2 20040122			WO 2003-US21925							20030715 <				
	WO	WO 2004006847				А3		20050407												
		W:	ΑE,	AG,	ΑL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,		
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ.	OM.	PG,		

```
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
             TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2491310
                                            CA 2003-2491310
                                20040122
                          AΑ
                                                                    20030715 <--
     AU 2003247869
                          Α1
                                20040202
                                            AU 2003-247869
                                                                    20030715 <--
     US 2004175378
                                20040909
                                            US 2003-620850
                          Α1
                                                                    20030715 <--
     EP 1537146
                                20050608
                          Α2
                                             EP 2003-764600
                                                                    20030715 <--
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1668644
                          Α
                                20050914
                                            CN 2003-816751
                                                                    20030715 <--
     JP 2005537267
                          Т2
                                20051208
                                            JP 2004-521771
                                                                    20030715 <--
PRAI US 2002-396263P
                          Ρ
                                20020715
                                           <--
     WO 2003-US21925
                          W
                                20030715
AB
     Disclosed are surprising discoveries concerning the role of anionic
     phospholipids and aminophospholipids in tumor vasculature and in viral
     entry and spread, and compns. and methods for utilizing these findings in
     the treatment of cancer and viral infections. Also disclosed are
     advantageous antibody, immunoconjugate and duramycin-based compns. and
     combinations that bind and inhibit anionic phospholipids and
     aminophospholipids, for use in the safe and effective treatment of cancer,
     viral infections and related diseases.
TT
     3056-17-5D, Stavudine, conjugates 7481-89-2D,
     Zalcitabine, conjugates
     RL: BSU (Biological study, unclassified); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (antibodies specifically bind to anionic phospholipids and/or
        aminophospholipids conjugated with duramycin peptide for treating viral
        infections and cancer)
RN
     3056-17-5 HCAPLUS
CN
     Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

```
ANSWER 7 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
L37
     2004:41226 HCAPLUS
ΑN
DN
     140:105321
ΤI
     Methods and compositions relating to isoleucine boroproline compounds
ΙN
     Adams, Sharlene; Miller, Glenn T.; Jesson, Michael I.; Jones, Barry
     Point Therapeutics, Inc., USA
PΑ
SO
     PCT Int. Appl., 152 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 2
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
     -----
                         ____
                                _____
                                            _____
PΙ
     WO 2004004658
                         Α2
                                20040115
                                            WO 2003-US21405
                                                                   20030709 <--
     WO 2004004658
                         А3
                                20050804
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2491466
                         AA
                                20040115
                                            CA 2003-2491466
                                                                   20030709 <--
     AU 2003265264
                          Α1
                                20040123
                                            AU 2003-265264
                                                                   20030709 <--
     US 2004077601
                          A1
                                20040422
                                            US 2003-616694
                                                                   20030709 <--
     US 2005084490
                         A1
                                20050421
                                            US 2003-616409
                                                                   20030709 <--
    EP 1578434
                         A2
                                20050928
                                            EP 2003-763380
                                                                   20030709 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006507352
                         Т2
                                20060302
                                           JP 2004-562634
                                                                   20030709 <--
PRAI US 2002-394856P
                          Ρ
                                20020709
                                          <--
     US 2002-414978P
                          Р
                                20021001
     US 2003-466435P
                         Ρ
                                20030428
    WO 2003-US21405
                         W
                                20030709
OS
    MARPAT 140:105321
AB
    A method for treating subjects with, inter alia, abnormal cell
    proliferation or infectious disease using agents of formula (I,
    AmNHCH(CH(CH3)CH2CH3)COA1R) (where Am and A1 are amino acids and R =
     organo boronates, organo phosphonates, fluoroalkyl ketones, alphaketos,
     N-peptiolyl-O-(acylhydroxylamines), azapeptides, azetidines, fluoroolefins
     dipeptide isosteres, peptidyl (\alpha-aminoalkyl) phosphonate esters,
     aminoacyl pyrrolidine-2-nitriles and 4-cyanothiazolidides) is claimed.
    Methods for stimulating an immune response using the compds. of the
     invention are also claimed. Compns. containing Ile-boroPro compds. are also
    provided as are kits containing the compns. The invention embraces the use of
     these compds. alone or in combination with other therapeutic agents.
     3056-17-5, Stavudine 7481-89-2, Zalcitabine
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic
    use); BIOL (Biological study); USES (Uses)
        (therapeutic methods and compns. relating to isoleucine boroproline
       compds. alone or in combination with other drugs, antibodies, or
       antigens)
RN
     3056-17-5 HCAPLUS
CN
    Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry. Rotation (-).

7481-89-2 HCAPLUS RN

Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (+).

L37 ANSWER 8 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

2003:971770 HCAPLUS ΑN

DN 140:27709

Preparation of phosphonic acid based prodrugs of TΙ phosphonylmethoxyethyladenine and its analogues for their therapeutic use as antiviral and anticancer agents

Reddy, K. Raja; Erion, Mark D.; Matelich, Michael C.; Kopcho, Joseph J. IN

PΑ

U.S. Pat. Appl. Publ., 44 pp. SO

CODEN: USXXCO

DT Patent

LA English

FAN.	CNT	1																	
	PATENT NO.					KIND DATE			APPLICATION NO.										
PI		JS 2003229225							US 2				20030512 <						
	CA	2485	702			AA		2004	0506		CA 2	003-	2485	702		20	0030	512 <-	
	WO	O 2004037161 O 2004037161			A2	2 20040506				WO 2	003-1	US14		20030512 <					
	WO																		
		W:	AE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
								DK,											
			•	•		•		IN,	•	•	•	•	•		•	•	•	•	
			-					MD,							-			-	
								sc,	•				•			•	•	•	
								VC,			•			•	•	•	•	•	
		RW:	•	•	•	•	•	MZ,	•	•	•	,		ZM,	ZW.	AM.	AZ.	BY,	
			•					TM,			•	•		•		•		-	
				•		•		IE,		•	•					•	•		
			•	-		•		CM,	•		•								
	ΑU	2003			-	-	-	-					•					512 <-	
		1532																512 <-	
								ES,						-		_			
						-	-		-			-		-			•	-	

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK JP 2006511490 T220060406 JP 2004-546667 20030512 <--PRAI US 2002-380545P Ρ 20020513 <--WO 2003-US14821 W 20030512 OS MARPAT 140:27709 GI

AB The present invention discloses a method of preparing phosphonate cyclic esters, such as I [M and V are cis to one another; MPO3H2 is a phosphonic acid selected from the group consisting of 9-(2phosphonylmethoxyethyl)adenine, (R)-9-(2-phosphonylmethoxypropyl)adenine, 9-(2-phosphonylmethoxyethyl) quanine, 9-(2-phosphonylmethoxy ethyloxy) adenine, 9-(2-phosphonylmethoxyethyl)-2,6-diaminopurine, (S)-1-(3-hydroxy-2-phosphonylmethoxypropyl) cytosine, (S)-9-(3-hydroxy-2-phosphonylmethoxypropyl)phosphonylmethoxypropyl)adenine, 9-(3-hydroxy-2phosphonylmethoxypropyl)guanine, and (S)-9-(3-fluoro-2-phosphonyl methoxypropyl)adenine; V = Ph, 2-pyridyl, 3-pyridyl, 4-pyridyl, 2-furanyl, 3-furanyl, 2-thienyl, 3-thienyl, optionally substituted with 1-3 substituents selected from a group consisting of F, Cl, Br, alkyl, CF3, OR6; R6 = alkyl, CF3], and pharmaceutically acceptable salts thereof for their therapeutic use as antiviral and anticancer agents. The process involves coupling of a chiral 1-phenylpropane-1,3-diol [Ph may be optionally substituted], with MPOC12 or an N-6 substituted analog thereof. Addnl., methods and salt forms that enable isolation and purification of the desired isomer are also described. Thus, phosphonate cyclic ester derivative II.MeSO3H was prepared via a multistep reaction sequence starting from 3-chlorobenzoyl chloride, trimethylsilyl acetate, 9-(2-Phosphonylmethoxyethyl)adenine (PMEA), N,N-diethylformamide, oxalyl chloride and methanesulfonic acid. Other examples include activation of phosphoramidate prodrugs by human microsomes and the identification and tissue distribution of the microsomal enzymes involved in activation. **181785-84-2,** ACH 126443 ΙT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (together with phosphonate cyclic esters of phosphonylmethoxyethyladenine for their therapeutic use as antiviral agents)

RN 181785-84-2 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-2,5-dihydro-5-(hydroxymethyl)-2-furanyl]-5-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Absolute stereochemistry. Rotation (-).

```
ANSWER 9 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
L37
ΑN
     2003:590943 HCAPLUS
DN
     139:154893
ΤI
     Phthalocyanine and porphyrazine pharmaceutical compositions
IN
     Compans, Richard W.; Marzilli, Luigi G.; Dixon, Dabney W.
PA
     Emory University, USA; Georgia State University Research Foundation, Inc.
SO
     PCT Int. Appl., 59 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
     -----
                                           -----
                        ____
                               -----
                                                                  _____
PΙ
    WO 2003061579
                         A2
                               20030731
                                           WO 2003-US1619
                                                                  20030117 <--
    WO 2003061579
                         А3
                               20031204
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               20020118 <--
PRAI US 2002-349944P
                         Р
OS
    MARPAT 139:154893
AB
     Pharmaceutical compns. containing a neutral or neg. charged compound having a
     phthalocyanine structure or one of the porphyrazines or the metal-complex
     formed thereof are effective in decreasing infection by HIV and other
     pathogens leading to sexually transmitted diseases. The compns. can be
     made suitable for any mode of administration. Preferably, the composition is
     suitable for topical administration, especially for mucosal administration.
The
    most preferred composition is suitable for vaginal or rectal administration.
ΙŢ
     3056-17-5, D4T 7481-88-1, D 4C 7481-89-2, DDC
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (co-administration with; mucosal and topical compns. containing
        phthalocyanines and porphyrazines for treatment of sexually transmitted
        diseases)
RN
     3056-17-5 HCAPLUS
CN
     Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
```

RN7481-88-1 HCAPLUS

Cytidine, 2',3'-didehydro-2',3'-dideoxy- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

RN7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 10 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN L37

ΑN 2003:551347 HCAPLUS

DN 139:111611

Porphyrins with virucidal activity, and use in the treatment of sexually ΤI transmitted diseases

IN Compans, Richard W.; Marzilli, Luigi G.; Sears, Amy E.; Dixon, Dabney W.

Emory University, USA; Georgia State University Research Foundation, Inc. PA

SO PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.		_																	
	PA:	CENT	NO.		KIND			DATE			APPLICATION NO.					DATE			
PI	WO 2003057176 WO 2003057176							20030717			WO 2003-US532					20030108			⟨ >
		W:	co,	CR,	CU,	CZ,	DE,	AU, DK, IN,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	

```
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    CA 2472583
                          AA
                                20030717
                                            CA 2003-2472583
                                                                    20030108 <--
    AU 2003212790
                          A1
                                20030724
                                            AU 2003-212790
                                                                    20030108 <--
    EP 1480638
                          A2
                                20041201
                                            EP 2003-708820
                                                                    20030108 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2005090428
                          A1
                                20050428
                                           US 2003-500884
                                                                    20030108 <--
PRAI US 2002-347197P
                          Ρ
                                20020108
                                          <--
    WO 2003-US532
                          W
                                20030108
OS
    MARPAT 139:111611
AB
    Compns. and methods are provided for the prevention of sexually
    transmitted diseases resulting from infection with one or more viral
    pathogens. The compns. contain one or more porphyrins, tetrapyrrole
    macrocycle compds. with bridges of one carbon joining the pyrroles.
    preferred embodiment, the compns. are administered in a formulation
    suitable for administration to a mucosal surface.
ΙT
    3056-17-5, D4T 7481-88-1, D 4C 7481-89-2, DDC
    RL: PAC (Pharmacological activity); THU (Therapeutic
    use); BIOL (Biological study); USES (Uses)
        (porphyrins with virucidal activity, and use in the treatment of
        sexually transmitted diseases, and use with other agents)
RN
     3056-17-5 HCAPLUS
    Thymidine, 2', 3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry. Rotation (-).

RN 7481-88-1 HCAPLUS CN Cytidine, 2',3'-didehydro-2',3'-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 7481-89-2 HCAPLUS CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME) Absolute stereochemistry. Rotation (+).

L37 ANSWER 11 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:413956 HCAPLUS

DN 138:396187

TI Combination therapy involving drugs which target cellular proteins and drugs which target pathogen-encoded proteins for inhibiting replication of pathogens

IN Schaffer, Priscilla A.; Schang, Luis M.

PA USA

SO U.S. Pat. Appl. Publ., 76 pp., Cont.-in-part of U.S. Ser. No. 951,058. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 4

		-																			
	PATENT NO.						D	DATE		APPLICATION NO.							DATE				
PI	US 2003099944				A1		2003	0529	US 2000-905687							20001206 <					
	WO	2000006170				A1	A1 20000210			WO 1999-US16252							19990716 <				
		W:	ΑU,	CA,	JP,	US															
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,			
			PT,	SE																	
PRAI	US 1998-94805P			P		1998	0731	<	-												
	HC	1000	_121	2610		D		1000	0427	1											

US 1999-131264P Ρ 19990427 US 1999-140926P Ρ 19990624 <--WO 1999-US16252 Α1 19990716 <--US 2000-656592 <--A2 20000907 US 2000-951058 20000912 <--A2

AΒ The invention relates to the identification of cdk inhibitors as inhibitors of pathogen gene expression, replication and reactivation. invention also relates to the identification of a combination therapy to inhibit pathogen replication in which a drug that inhibits pathogen replication by targeting a specific pathogen-encoded protein is administered in combination with a drug that inhibits pathogen replication by targeting host-encoded cdk proteins. Compns. and assays for the identification and use of such inhibitors are provided as are methods of use of the inhibitors. Vero cells (mammalian cell line) were infected with 3 PFUs of either a wild-type or an antiviral drug-resistant strain of HSV-1. One hour after infection, cultures were washed with PBS and then refed with medium containing acyclovir (ACV) and with cellular cyclin-dependent kinase inhibitors Roscovitine (Rosco) or Purvalanol (Purv). The effects of either Rosco or Purv on inhibiting viral replication, when used in combination with ACV, were greater than when either Rosco or Purv were used alone. Importantly, the increased effects of Rosco and Purv were observed during treatment of ACV-susceptible wild-type HSV-1 (KOS) and during treatment of an ACV-resistant strain (TK-) of HSV-1.

IT 3056-17-5, Stavudine

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)

(pathogen DNA replication inhibitor; combination therapy involving drugs which target cellular proteins and drugs which target pathogen-encoded proteins for inhibiting replication of pathogens)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L37 ANSWER 12 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:222146 HCAPLUS

DN 138:253701

TI Fusion proteins comprising transduction and cytotoxic domains for treating pathogenic infection

IN Dowdy, Steven F.

PA Washington University, USA

SO U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Provisional Ser. No. 82,402.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2003054000	A1	20030320	US 2001-775052	20010201 <
	US 6645501 US 6221355	B2 B1	20031111	US 1998-208966	19981210 <
PRAI	US 1997-69012P	P		<	13301210 \
	US 1998-82402P	P	19980420	<	

AB The present invention provides an anti-pathogen system comprising one or more fusion proteins that includes a transduction domain and a cytotoxic domain. The cytotoxic domain is specifically activated by a pathogen infection. The anti-pathogen system effectively kills or injures cells infected by one or a combination of different pathogens. Further provided are protein transduction domains that provide enhanced transduction efficiency. The pathogen includes cytomegalovirus, herpes simplex virus, hepatitis C virus, yellow fever virus,

flavivirus, rhinovirus, HIV-1, HIV-2, HTLV-III, LAV, Plasmodium falciparum, Plasmodium vivax, Plasmodium ovale, Plasmodium malariae, etc.

IT 3056-17-5, d4T 7481-89-2, DdC

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fusion proteins comprising transduction and cytotoxic domains for treating viral, retroviral and plasmodial infections)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 13 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

ΑN 2003:128527 HCAPLUS

DN 138:395512

TΙ Efficacy of induction therapy with high-dose interferon for patients with hemophilia and human immunodeficiency virus-hepatitis C virus coinfection

ΑU Hanabusa, Hideji

CS Department of Hematology, Ogikubo Hospital, Tokyo, Japan

SO Clinical Infectious Diseases (2002), 35(12), 1527-1533 CODEN: CIDIEL; ISSN: 1058-4838

University of Chicago Press

DT Journal

PΒ

LA English

AB To evaluate the efficacy of high-dose interferon (IFN) on human immunodeficiency virus (HIV) and hepatitis C virus (HCV) infection, 15 HIV-pos. patients and 15 age-matched HIV-neg. patients with hemophilia were treated with 9 million units (MU) of IFN- α 2a daily for 2 wk, followed by 9 MU of IFN- $\alpha 2a$ 3 times/wk for a further 22 wk. At week 2, HIV RNA levels decreased from 7410 \pm 2190 to 320 \pm 130 copies/mL, and HCV RNA levels decreased from 390 + 103 \pm 80 + 103 to 70 + 103 \pm 30 + 103 copies/mL in the HIV-pos. group and from $300 + 103 \pm 80 + 103$ to $10 + 103 \pm 10 + 103$ copies/mL in the HIV-neg. group. HCV RNA was undetectable after treatment in 4 of 12 HIV-pos. and 6 of 15 HIV-neg. patients. IFN therapy was discontinued because of adverse effects in 3 HIV-pos. patients. Induction therapy and the dose of IFN should be evaluated in combination therapy with IFN and ribavirin.

IΤ 3056-17-5, Stavudine

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (efficacy of induction therapy with high-dose interferon- $\alpha 2a$ for patients with hemophilia and HIV-hepatitis C

virus coinfection)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RETABLE

Referenced Author	Year			Referenced Work	Referenced
(RAU)		(RVL)		(RWK)	File
Bain, V	12001	-	+===== 2818		HCAPLUS
Cacciola, I			122	N Engl J Med	MEDLINE
•			1346	Gastroenterology	HCAPLUS
Cramp, M Daar, E	12000		1589	J Infect Dis	MEDLINE
•	12001		11425	Lancet	IMEDLINE
Darby, S	-		11020	•	·
Eyster, M				Blood	MEDLINE
Eyster, M	1999		11062	J Infect Dis	MEDLINE
Fried, M	•		13225	Am J Gastroenterol	HCAPLUS
Fukai, K	11998		1325	J Infect Dis	HCAPLUS
Glue, P	2000		1647	Hepatology	HCAPLUS
Hanabusa, H	11995		33	Abstract 19, Program	
Harrington, M	12000		2147	Lancet	MEDLINE
Ho, D			450	IN Engl J Med	MEDLINE
Hoggard, P	1997		1231	Antimicrob Agents Ch	HCAPLUS
Kuboki, M	2000		277A	Hepatology	
Lafeuillade, A		•	1280	Lancet	HCAPLUS
Lam, N			1226	Hepatology	HCAPLUS
Landau, A			1839	AIDS	HCAPLUS
Manns, M	12001		1958	Lancet	HCAPLUS
Martinot-Peignoux, M	1995		1050	Hepatology	MEDLINE
McHutchison, J		•	1485	N Engl J Med	HCAPLUS
Niro, G			1728	Hepatology	HCAPLUS
Okamoto, H	•		1737	J Gen Virol	HCAPLUS
Palella, F			1853	N Engl J Med	1
Poynard, T			778	Hepatology	HCAPLUS
Sabin, C	•		164	J Infect Dis	MEDLINE
Sanchez-Quijano, A	•		949	Eur J Clin Microbiol	MEDLINE
Seeff, L	1999	107	S10	Am J Med	1
Shindo, M	•	33	1299	Hepatology	HCAPLUS
Takayama, S	1999	104	626	Br J Haematol	MEDLINE

L37 ANSWER 14 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:53537 HCAPLUS

DN 138:105636

TI Stimulation of immune response with low doses of cytokines

IN Smith, Kendall A.

PA Cornell Research Foundation, Inc., USA

SO U.S., 21 pp., Cont.-in-part of U.S. 6,045,788.

CODEN: USXXAM

```
DT
     Patent
LA
     English
FAN.CNT 3
     PATENT NO.
                        KIND
                                DATE
                                          APPLICATION NO.
                                                                   DATE
     -----
                         ____
                                -----
                                            -----
                                                                   _____
PΙ
     US 6509313
                         В1
                                20030121
                                            US 1996-646098
                                                                  19960507 <--
     US 6045788
                         Α
                                20000404
                                            US 1996-608516
                                                                  19960228 <--
    WO 9741831
                         A1
                                19971113
                                            WO 1997-US7787
                                                                   19970507 <--
            AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
            ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,
            LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
            SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,
            GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,
            ML, MR, NE, SN, TD, TG
    AU 9730613
                                19971126
                                            AU 1997-30613
                         Α1
                                                                   19970507 <--
     EP 901370
                         Α1
                                19990317
                                            EP 1997-925488
                                                                   19970507 <--
            DE, FR, GB, IT, NL, SE
     JP 2000510122
                         T2
                                20000808
                                           JP 1997-540196
                                                                   19970507 <--
PRAI US 1996-608516
                         A2
                                19960228
                                         <--
     US 1996-646098
                                19960507
                         Α
                                         <--
    WO 1997-US7787
                         W
                                19970507 <--
    A method of activating the immune system of a subject comprises the
AB
     chronic administration of low doses of an agent having cytokine activity,
     including natural and recombinant cytokines, fragments, analogs, fusion
    proteins, and derivs. thereof, that are pharmaceutically acceptable, and
     their mixts. with other biol. active agents and formulation ingredients.
     The agent is provided as a unit dosage form, in systemic and topical
    product form, as an implant, inhalant, transdermal delivery device, and
    ultrasound and electrotransport devices, as well as in the form of a kit
     for self-administration. The examples given include chronic
     administration of interleukin-2, interferon \gamma, joint
     antiviral/interferon \gamma therapy, derivatized and mutated interferon
    \gamma, interleukin-15, CD40 ligand, natural interferon \alpha2, and
     interferon \beta.
IT
     3056-17-5, d4T 7481-89-2, DDC
     RL: PAC (Pharmacological activity); THU (Therapeutic
    use); BIOL (Biological study); USES (Uses)
        (immune response stimulation with low doses of cytokines)
RN
     3056-17-5 HCAPLUS
```

Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

CN

RN 7481-89-2 HCAPLUS CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RETABLE

RETABLE					
	Year	-		Referenced Work	Referenced
(RAU)	(RPY)			(RWK)	File
_	+===== 1984	+====- '	+=====	+=====================================	•
Anon Anon	11988	 	 	EP 0118977 EP 0254593	HCAPLUS
	11988	 	 	IWO 8803411	HCAPLUS
	11990	 	1	IEP 0353910	HCAPLUS
	11990	 	} 	IEP 0333910	HCAPLUS
	11990	l t	} (WO 9014432	HCAPLUS
	11991	! !	1	IEP 0405315	HCAPLUS
	11991	l I	 	WO 9101143	HCAPLUS
	11992	 	 	IWO 9205256	HCAPLUS
	11992	 	 1	IWO 9208792	HCAPLUS
	11992	 	1		HCAPLUS
	11992	 	 	WO 9213568	HCAPLUS
	11995	 	 	EP 0533416 EP 0640336	HCAPLUS
	11995	 	•	•	HCAPLUS
	11996	 	 1	IWO 9527722	HCAPLUS
	11996	 	 1	WO 9604013	HCAPLUS
	11996	 	 1	WO 9630515 WO 9636350	HCAPLUS
		1 186	ı 13287	Blood	HCAPLUS
	11993	100		US 5208018 A	HCAPLUS
	11995	{ 1		IUS 5474769 A	HCAPLUS HCAPLUS
	11993	! 1	•	US 5229109 A	HCAPLUS
		1167		The Journal of Infec	
	11991	1 1 0 7		US 5004605 A	HCAPLUS
	11990	} 1	•	IUS 4938956 A	HCAPLUS
	•	1 184	•	Cell	HCAPLUS
				Journal of Clinical	
· ·	•			Immunity	HCAPLUS
	•			Cancer Research	HCAPLUS
	11990	 /		US 4940456 A	I
	2000	! !	•	US 6045788 A	HCAPLUS
	•	766		Receptor Activation	•
	11993	1 7 0 0		IUS 5236707 A	HCAPLUS
	11995	1		US 5420109 A	HCAPLUS
	11990	! 		IUS 4933433 A	HCAPLUS
	11994	 	•	•	HCAPLUS
	11992	i 1		IUS 5145677 A	HCAPLUS
	•	112		Annu Rev Cell Dev Bi	
	11992	1		US 5126129 A	HCAPLUS
		1 176	1 1 687	Cancer	MEDLINE
	11991	, , ₀	1 00 /		HCAPLUS
Tarchoan	エンフエ	'	1	105 302000/ A	LUCHETOS

L37 ANSWER 15 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:947003 HCAPLUS

DN 138:29124

TI Time release reverse transcriptase inhibitors

IN Halstead, Bruce

```
PA
    USA
SO
    U.S. Pat. Appl. Publ., 3 pp.
    CODEN: USXXCO
DT
    Patent
LA
    English
FAN.CNT 6
    PATENT NO.
                              DATE
                       KIND
                                        APPLICATION NO.
                                                                DATE
    -----
                       ----
                                         -----
                                                                _____
                                         US 2002-159417
    US 2002187957
                              20021212
ΡI
                       A1
                                                               20020529 <--
    WO 2003101389
                        A2
                              20031211
                                          WO 2003-US17131
                                                               20030529 <--
    WO 2003101389
                        А3
                              20040513
    WO 2003101389
                        В1
                              20040624
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                           20030529 <--
    AU 2003238842
                        Α1
                              20031219
                                        AU 2003-238842
    US 2005129780
                              20050616
                                          US 2003-515773
                                                               20030529 <--
                        A1
                                                              20030529 <--
    EP 1551419
                              20050713
                                        EP 2003-734301
                        Α2
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                     P
PRAI US 2001-294477P
                              20010530
                                       <--
    US 2002-159417
                        Α
                              20020529
                                       <--
                     A
    US 2002-159433
                              20020529
                                       <--
                             20020529
    US 2002-159434
                       Α
                                       <--
    US 2002-159723
                             20020529
                       Α
                                       <--
    US 2002-159747
                       Α
                              20020529
                                       <--
    US 2002-395227P
                       P
                              20020710
                                       <--
    WO 2003-US17131
                        W
                              20030529
AB
    A pharmaceutical composition comprises a reverse transcriptase inhibitor in a
    quantity sufficient to reduce a viral serum titer of a virus in an amount of
    at least 20% over a period of at least 6 h, wherein the preferred reverse
    transcriptase inhibitor comprises a plant extract The compns. further
    comprise a chelating agent, the chelating agent being present in a single
    dose in a concentration such that the serum Mg2+ and/or Ca2+ concentration is
reduced at
    least 20% over a period of at least 6 h,.
ΙT
    3056-17-5, Stavudine 7481-89-2, Zalcitabine
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (time release reverse transcriptase inhibitors)
RN
    3056-17-5 HCAPLUS
    Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
CN
```

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L37 ANSWER 16 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:927626 HCAPLUS

DN 138:20431

TI Use of mitochondrial DNA-specific quantitative real-time PCR for diagnosis and monitoring drug toxicity in humans suffering with various disorders such as viral infections, neurological disorders, cancer, arthritis, male sterility or organ failure

IN Cote, Helene; Montaner, Julio; O'Shaughnessy, Michael V.

PA The University of British Columbia, Can.

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

r AN.	PATENT	NO.	KI	KIND DATE				-			NO.		20020529 < BZ, CA, CH, EE, EE, ES, JP, KE, KG, MK, MN, MW,		
ΡI	WO 2002097124			A1 20021205									20	20020529 < BZ, CA, CH, EE, EE, ES, JP, KE, KG, MK, MN, MW, SI, SK, SK, ZA, ZM, ZW, AT, BE, CH, PT, SE, TR, SN, TD, TG 20020529 < 20020529 <	
	W:	AE, AG,	AL, AM	, AT,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,
		CN, CO,	CR, CU	, CZ,	CZ,	DE,	DE,	DK,	·DK,	DM,	DΖ,	EC,	EE,	EE,	ES,
		FI, FI,	GB, GD	, GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
		KP, KR,	KZ, LC	, LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,
		MX, MZ,	NO, NZ	, OM,	PH,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SK,
		SL, TJ,	TM, TN	, TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,
		AM, AZ,	BY, KG												
	RW:	GH, GM,	KE, LS	, MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
			CF, CG	, CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
	CA 2416	332	A	A	20021	205	(CA 20	002-	2416	332		20	0020	529 <- -
		099933													
	EP 1395681			1	20040	310		EP 20	002-	7297:	32		20	0020	529 <
	R:	AT, BE,	CH, DE	, DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE, SI,	LT, LV	, FI,	RO,	MK,	CY,	ΑL,	TR						
	JP 2004	T	2	20041	021		JP 20	003-	5002	39		20	0020	529 <	

The invention discloses the use of quant. real-time polymerase chain reaction (PCR) to monitor drug toxicity, which involves measuring the relative amount of mitochondrial DNA in peripheral blood cells obtained from individuals suffering with various disorders. The invention relates that the quant. real-time PCR involves co-amplification of a mitochondrial sequence and a reference sequence, such as a genomic sequence. The invention also discloses that said disorders include HIV infection, cancer, hepatitis A, hepatitis B, hepatitis C, arthritis, Alzheimer's disease, Parkinson's disease, or Huntington's disease. The invention also relates that said drugs used to treat patients include nucleoside or nucleotide analogs, and/or reverse

disease. The invention also relates that said drugs used to treat patients include nucleoside or nucleotide analogs, and/or reverse transcriptase inhibitors. The invention further discloses that the said method can be used to diagnose conditions such as male infertility and organ failure. The method was illustrated by detecting the amount of mitochondrial gene CCOI and the nuclear gene ASPOL γ in HIV infected individuals undergoing antiviral therapy.

IT 3056-17-5, Stavudine 7481-89-2, Hivid

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mitochondrial DNA-specific quant. real-time PCR for monitoring drug toxicity in individuals suffering for various disorders such as viral infections, neurol. disorders, cancer, and arthritis)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Referenced Author (RAU)	Year VOL PG (RPY) (RVL) (RPG)	•	Referenced File
Arnaudo, E Berlin, K		LANCET EXPERIMENTAL CELL	MEDLINE

```
Brinkman, K
                      |1999 |354
                                 |1112 |LANCET
                                                              | HCAPLUS
Church, J
                      |2001 |138
                                 |748 |JOURNAL OF PEDIATRIC|MEDLINE
                                  1685
Kakuda, T
                      12000 122
                                         |CLINICAL THERAPEUTIC| HCAPLUS
                                  1657
Kao, S
                      |1998 |4
                                         |MOLECULAR HUMAN REPR|HCAPLUS
                                  177
Lewis, W
                      |1997 |76
                                         |LABORATORY INVESTIGA|HCAPLUS
                                  | 1824 | ANTIMICROBIAL AGENTS | HCAPLUS
Medina, D
                      |1994 |38
Mitokor
                      |2001 |
                                         |WO 0135096 A
                                                             HCAPLUS
The Regents Of The Univ|2000 |
                                         |WO 0050043 A
                                                             HCAPLUS
L37
    ANSWER 17 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
ΑN
     2002:832613 HCAPLUS
DN
    137:333119
ΤI
     3-Aminopyridine-2-carboxyaldehyde thiosemicarbazones and methods using
    them for treating viral and fungal infections
ΙN
    King, Ivan C.; Doyle, Terrence W.; Sznol, Mario; Sartorelli, Alan C.;
    Cheng, Yung-Chi
PA
    Vion Pharmaceuticals, Inc., USA; Yale University
SO
    PCT Int. Appl., 68 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                        KIND
                               DATE
                                         APPLICATION NO.
                                                                DATE
    _____
                        ----
                                          -----
                                                                 _____
    WO 2002085358
PΙ
                        A2
                               20021031
                                        WO 2002-US12358
                                                                20020418 <--
    WO 2002085358
                        A3
                               20021219
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    US 2002188011
                         Α1
                               20021212
                                           US 2002-126050
                                                                 20020418 <---
    US 6911460
                         B2
                               20050628
    CN 1503669
                               20040609
                                           CN 2002-808591
                                                                 20020418 <--
                         Α
    US 2005261251
                         A1
                               20051124
                                         US 2005-93648
                                                                 20050330 <--
PRAI US 2001-285559P
                         P
                               20010420
                                        <--
    US 2002-126050
                         А3
                               20020418 <--
OS
    MARPAT 137:333119
AB
    The invention provides methods for treating viral or fungal infections
    using 3-aminopyridine-2-carboxyaldehyde thiosemicarbazone (3-AP) and
     3-amino-4-methylpyridine-2-carboxaldehyde thiosemicarbazone (3-AMP), and
    prodrug forms thereof, as well as pharmaceutical compns. comprising these
    compds. Preparation of compds. of the invention is described.
    3056-17-5 3416-05-5, 2',3'-Dideoxythymidine
ΙT
    7481-88-1 7481-89-2, 2',3'-Dideoxycytidine
    135212-57-6 147058-39-7 181785-84-2
    RL: PAC (Pharmacological activity); THU (Therapeutic
    use); BIOL (Biological study); USES (Uses)
        (aminopyridinecarboxyaldehyde thiosemicarbazones for treatment of viral
        and fungal infections)
RN
     3056-17-5 HCAPLUS
CN
     Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
Absolute stereochemistry. Rotation (-).
```

RN 3416-05-5 HCAPLUS

CN Thymidine, 3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 7481-88-1 HCAPLUS

CN Cytidine, 2',3'-didehydro-2',3'-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 135212-57-6 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-2,5-dihydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 147058-39-7 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 181785-84-2 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-2,5-dihydro-5-(hydroxymethyl)-2-furanyl]-5-fluoro-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L37 ANSWER 18 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:570135 HCAPLUS

DN 137:134544

TI Incidence of and risk factors for severe hepatotoxicity associated with antiretroviral combination therapy

AU Wit, Ferdinand W. N. M.; Weverling, Gerrit Jan; Weel, Jan; Jurriaans, Suzanne; Lange, Joep M. A.

CS National AIDS Therapy Evaluation Center, Departments of Human Retrovirology, Division of Infectious Diseases, Tropical Medicine, and AIDS, Department of Internal Medicine, Academic Medical Center, University of Amsterdam, Amsterdam, Neth.

SO Journal of Infectious Diseases (2002), 186(1), 23-31 CODEN: JIDIAQ; ISSN: 0022-1899

PB University of Chicago Press

DT Journal

LA English

AB This retrospective cohort study investigated whether particular antiretroviral agents are associated with a higher risk for developing grade 4 liver enzyme elevations (LEEs) in patients with human immunodeficiency virus (HIV) type 1 infection who are starting to receive highly active antiretroviral therapy (HAART). Grade 4 LEE was defined as aminotransferase levels >10 times the upper limit of normal and >200 U above baseline levels. A multivariate Cox model was used to identify risk factors. The incidence of LEE was 6.3%. No patients died of LEE consequences. Risk factors were higher baseline alanine aminotransferase levels, chronic hepatitis B or C virus infection, antiretroviral therapy-naive patients undergoing their first HAART regimen, recent start of a regimen of nevirapine or high-dose ritonavir, and female sex. In hepatitis B virus (HBV)-coinfected patients, discontinuing lamivudine (3TC) use was a risk factor. In 97% of cases, ≥ 1 risk factor was present. In HBV coinfected patients using 3TC, continued use of 3TC should be considered, even if 3TC-resistant HIV strains develop. ΙT

T 3056-17-5, Stavudine 7481-89-2, Zalcitabine RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(incidence of and risk factors for severe hepatotoxicity associated with antiretroviral combination therapy)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Referenced Author (RAU)	(RPY) (RVL)	(RPG)	• • • • • • • • • • • • • • • • • • • •	File
Anon de Reguena, G	·	•	Prescrire Int	
Dieterich, D	2001	i	[Abstract 44],	Progr

```
Martinez, E
                       |2001 |15
                                                               | HCAPLUS
                                   |1261 |AIDS
Reisler, R
                       |2001 |
                                          |[Abstract 43], Progr|
                                   1
     ANSWER 19 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
1.37
     2002:521407 HCAPLUS
AN
DN
     137:73237
TΙ
     Single and combination therapy using drugs with target cellular proteins
     and drugs which target pathogen-encoded proteins
ΙN
     Schaffer, Priscilla A.; Schang, Luis M.
     The Trustees of the University of Pennsylvania, USA
PΑ
SO
     PCT Int. Appl., 153 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                   DATE
     ______
                         ____
                                _____
                                            -----
PΙ
     WO 2002053096
                         A2
                                20020711
                                           WO 2001-US47257
                                                                   20011206 <--
     WO 2002053096
                         A3
                                20030130
         W: AU, CA, JP
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR
     AU 2002245081
                         A1
                                20020716
                                          AU 2002-245081
                                                                   20011206 <--
PRAI US 2000-251623P
                         Ρ
                                20001206
                                         <--
     US 2000-251653P
                         Ρ
                                20001206 <--
     WO 2001-US47257
                         W
                                20011206 <--
AB
     The invention relates to the identification of cdk inhibitors as
     inhibitors of pathogen gene expression, replication and reactivation. The
     invention also relates to the identification of a combination therapy to
     inhibit pathogen replication in which a drug that inhibits pathogen
     replication by targeting a specific pathogen-encoded protein is
     administered in combination with a drug that inhibits pathogen replication
     by targeting host-encoded cdk proteins. Compns. and assays for the
     identification and use of such inhibitors are provided as are methods of
     use of the inhibitors.
```

IT 3056-17-5, Stavudine

RL: PAC (Pharmacological activity); THU (Therapeutic

use); BIOL (Biological study); USES (Uses)

(drugs with target cellular proteins and drugs which target pathogen-encoded proteins for single and combination therapy)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L37 ANSWER 20 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:395261 HCAPLUS

DN 137:15339

- TI Hepatotoxicity associated with antiretroviral therapy containing dual versus single protease inhibitors in individuals coinfected with hepatitis C virus and human immunodeficiency virus
- AU Cooper, Curtis L.; Parbhakar, M. A.; Angel, Jonathan B.
- CS Division of Infectious Diseases, Ottawa Hospital Research Institute, University of Ottawa, ON, Can.
- SO Clinical Infectious Diseases (2002), 34(9), 1259-1263 CODEN: CIDIEL; ISSN: 1058-4838
- PB University of Chicago Press
- DT Journal
- LA English
- The aim of this study was to determine the rates of patients coinfected with AB human immunodeficiency virus (HIV) and hepatitis C virus (HCV) who discontinued therapy as a result of protease inhibitor (PI)-related hepatotoxicity, a retrospective review was conducted. Baseline CD4 counts, plasma HIV RNA levels, and duration of therapy were comparable between single- and dual-PI-treated subjects and between subjects receiving ritonavir-containing therapy and those receiving ritonavir-sparing therapy. The proportions of patients with elevations in alanine aminotransferase level to ≥5 times the upper limit of normal (19% vs. 26%) and hyperbilirubinemia (30% vs. 38%) were similar between the dual-PI (n = 27) and single-PI treatment groups (n = 39), resp. No difference in these characteristics was observed between ritonavir-containing (n = 34) and ritonavir-sparing (n = 32) treatment arms. Rates of treatment discontinuation due to hepatotoxicity were similar for single-PI and dual-PI therapy and for ritonavir-containing and ritonavir-sparing regimens. Dual-PI therapy and inclusion of ritonavir do not seem to increase the rates of hepatotoxicity in PI-treated, HIV-HCV coinfected subjects.

IT **3056-17-5**, Stavudine

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(hepatotoxicity associated with antiretroviral therapy containing dual vs. single protease inhibitors in individuals coinfected with

hepatitis C virus and human

immunodeficiency virus)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Referenced Author (RAU)	(RPY) (RVL) (RPG		Referenced File
Bica, I	2001 32 492	Clin Infect Dis	MEDLINE
Bonacini, M		Arch Intern Med	MEDLINE
Brau, N		Lancet	MEDLINE

```
Cameron, D
                     |1999 |13
                                 |213 |AIDS
                                                             HCAPLUS
Cameron, D
                     |1998 |351 |543 |Lancet
                                                             | HCAPLUS
                     |2001 |357 |1412 |Lancet
Carr, A
                                                             MEDLINE
Den Brinker, M
                     |1998 |
                                 - 1
                                        |Program and abstract|
Gerard, Y
                     |2000 |14
                                 |2723 |AIDS
                                                             | HCAPLUS
Gisolf, E
                     |2000 |31 |1234 |Clin Infect Dis
                                                           | HCAPLUS
| HCAPLUS
Gulick, R
                     |1997 |337 |734
                                        |N Engl J Med
Johri, S
                     |2000 |14 |1286 |AIDS
                                                            IMEDLINE
                     |2000 |14 |463 |AIDS
Melvin, D
                                                            MEDLINE
                      |2000 |133 |192 |Ann Intern Med
Miller, K
                                                            IMEDLINE
National Institutes of |1992 |
                                        |ACTG criteria: table|
Puoti, M | 2000 | 24 | 211 | J Acquir Immune Defi| HCAPLUS
Rockstroh, J
                     |2000 |14 |1181 |AIDS
                                                             | HCAPLUS
Saves, M
                     |1999 |13 |F115 |AIDS
                                                             IHCAPLUS
                                |3451 |Antimicrob Agents Ch|HCAPLUS
Saves, M
                     |2000 |44
Sulkowski, M
                     |2000 |283 |74
                                        JAMA
                                                             IHCAPLUS
Vento, S
                     |1998 |12
                                1116
                                       IAIDS
                                                             IMEDITNE
Workman, C
                     |1999 |
                                  |195 | Program and abstract|
Zucker, S
                     |2001 |98
                                |12671 | PNAS
                                                             | HCAPLUS
L37 ANSWER 21 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
     2002:314958 HCAPLUS
     136:340939
     Preparation of modified nucleosides for treatment of viral infections and
    abnormal cellular proliferation
     Stuyver, Lieven; Watanabe, Kyoichi A.
    Pharmasset Limited, USA
    PCT Int. Appl., 230 pp.
    CODEN: PIXXD2
DΤ
    Patent
    English
T.A
FAN.CNT 2
                     KIND DATE APPLICATION NO.
                       ----
                                          _____
    WO 2002032920 A2 20020425
WO 2002032920 A3 20040219
                               20020425
                                        WO 2001-US46113
ΡI
                                                               20011018 <--
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
            KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
            IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
            GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2426187 AA
                               20020425
                                        CA 2001-2426187
                                                                20011018 <--
     AU 2002028749
                        A5
                               20020429
                                          AU 2002-28749
                                                                20011018 <--
    US 2003087873 A1 20030508 US 2001-45292
EP 1411954 A2 20040428 EP 2001-987756
                                                               2<u>0011018</u> <--
20011018 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY, TR
                                        CN 2001-820816 20011018 <--
BR 2001-14837 20011018 <--
     JP 2004533406 T2
                               20041104
     CN 1646141
                             20050727
                   A 20050727 CN

A 20060509 BF

P 20001018 <--

P 20010406 <--

3 W 20011018 <--
                        Α
     BR 2001014837
PRAI US 2000-241488P
US 2001-282156P
    WO 2001-US46113
OS
    MARPAT 136:340939
GΙ
```

AΒ Modified nucleosides, e.g. I, wherein D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid; X_is H, halogen, NH2, substituted amine, oxime, OH, alkoxy, SH, thioalkyl; Y is O, S, Se; R and R1 are independently H, alkyl, alkenyl, alkynyl, aryl, alkylaryl, halogen, NH2, substituted amine, oxime, hydrazine, OH, alkoxy, SH, thioalkyl, NO2, NO, CH2OH, CH2OH, ester, CONH2, amide, CN; R2 and R3 are independently 🖳 halogen, OH, SH, OMe, SMe, NH2, NHMe, CH:CH2, CN, CH2NH2, CH20H, CO2H; were prepared for treating a Flaviviridae (including BVDV and HCV), Orthomyxoviridae (including Influenza A and B) or Paramyxoviridae (including RSV) infection, or conditions related to abnormal cellular proliferation, in a host, including animals, and especially humans. This invention also provides an effective process to quantify the viral load, and in particular BVDV, HCV or West Nile Virus load, in a host, using real-time polymerase chain reaction ("TR-PCR"). Addnl., the invention discloses probe mols. that can fluoresce proportionally to the amount of virus present in a sample. Thus, (1'R, 2'S, 3'R, 4'R) - 1 - [2, 3-dihydroxy-4-(hydroxymethyl) cyclopentan-1-yl] - 5fluorocytosine was prepared and tested in vitro as antiviral and antitumor agent.

IT 241806-22-4P 241806-28-0P 415705-39-4P 415705-40-7P 415705-43-0P 415705-44-1P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation)

RN 241806-22-4 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1R,3S)-3-(hydroxymethyl)cyclopentyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 241806-28-0 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(1R,3S)-3-(hydroxymethyl)cyclopentyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 415705-39-4 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-[(1S,3R)-3-(hydroxymethyl)cyclopentyl](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 415705-40-7 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(1S,3R)-3-(hydroxymethyl)cyclopentyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 415705-43-0 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(1S,3R)-3-(hydroxymethyl)cyclopentyl]-5-iodo-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 415705-44-1 HCAPLUS

2(1H)-Pyrimidinone, 4-amino-1-[(1R,3S)-3-(hydroxymethyl)cyclopentyl]-5-CN iodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 22 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:171918 HCAPLUS

DN 136:217007

TΙ Preparation of antiviral nucleoside derivatives as inhibitors of subgenomic hepatitis C virus RNA replication

IN Devos, Rene; Dymock, Brian William; Hobbs, Christopher John; Jiang, Wen-rong; Martin, Joseph Armstrong; Merrett, John Herbert; Najera, Isabel; Shimma, Nobuo; Tsukuda, Takuo

PΑ F. Hoffmann-La Roche Ag, Switz.

SO PCT Int. Appl., 225 pp.

CODEN: PIXXD2

DT Patent

LA		lish																	
FAN.	CNT	1																	
	PAT	ENT	NO.			KIND DATE			APPL:	ICAT	CATION NO.				DATE				
							_												
PΙ	WO	2002	0184	04		A2		2002	0307	1	WO 2	001-1	EP96:	33		20	00108	321 <	-
	WO 2002018404				C2		2003	1002											
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,	
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	ΤZ,	UA,	UG,	
			UZ,	VN,	YU,	ZA,	ZW												
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AM,	AZ,	BY,	KG,	
			ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	
			GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG									
	US 2003008841					A1		20030109 US 2001-923620					20010807 <						
	CA	2419	399			AA		2002	0307		CA 2	001-	2419	399		20	00108	321 <	_

		2001 1315		97		A5 A2		2002 2003	0313 0604				9549 9761	7 28		_	00108		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY, A	L,	TR							
	BR	2001	01363	11		Α		2003	0624	BR	20	01-	1361	1		20	00108	321	<
	JΡ	2004	51308	83		T2		2004	0430	JP	20	02-	5239	18		20	00108	321	<
	ZA	2003	0015	40		Α		2004	0621	ZA	20	03-	1540			20	00302	225	<
	US	2004	1107	18		A1		2004	0610	US	20	03-	6788	04		20	00310	003	<
PRAI	GB	2000	-2128	85		Α		2000	0830	<									
	GB	2000	-2663	11		Α		2000	1031	<									
	US	2001	-923	620		В1		2001	0807	<									
	WO	2001	-EP9	633		W		2001	0821	<									
OS	MAI	RPAT	136:2	2170	07														
GI																			

HO
$$X \rightarrow B$$
 $R^1 \quad R^2 \quad R^3 \quad I$

AB Nucleosides I , wherein R1 is hydrogen, hydroxy, alkyl, hydroxyalkyl, alkoxy, halogen, cyano, isocyano or azido; R2 is hydrogen, hydroxy, alkoxy, chlorine, bromine or iodine; R3 is hydrogen; or R2 and R3 together represent =CH2; or R2 and R3 represent fluorine; X is O, S or CH2; B is a substituted purine base, were prepared as inhibitors of subgenomic hepatitis C virus (HCV) RNA

replication. Thus, nucleoside II was prepared and tested for the inhibition of HCV RNA replication (EC50 = 0.6 μM).

IT 7481-89-2P 121154-57-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of antiviral nucleoside derivs. as inhibitors of subgenomic hepatitis C virus RNA replication)

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 121154-57-2 HCAPLUS

CN Thymidine, 3'-deoxy-5'-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L37 ANSWER 23 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:109650 HCAPLUS

DN 136:288583

TI Effects of HAART on hepatitis C, hepatitis
G, and TT virus in multiply coinfected HIV-positive patients with haemophilia

AU Takamatsu, J.; Toyoda, H.; Fukuda, Y.; Nakano, I.; Yokozaki, S.; Hayashi, K.; Saito, H.

CS Department of Transfusion Medicine, Nagoya University School of Medicine, Nagoya, 466-8550, Japan

SO Haemophilia (2001), 7(6), 575-581 CODEN: HAEMF4; ISSN: 1351-8216

PB Blackwell Science Ltd.

DT Journal

LA English

AB In multiply coinfected human immunodeficiency virus (HIV)-pos. patients, we investigated the effects of high-activity antiretroviral therapy (HAART) using HIV protease inhibitors on three other viruses:

hepatitis C virus (HCV),

hepatitis G virus (HGV), and TT virus (TTV). Viral concns. were measured serially by polymerase chain reaction methods in five patients with quadruple infection (HIV, HCV, HGV, and TTV) and in two patients with triple infection (HIV, HCV, and HGV) before and during HAART. In addition, CD4+ cell counts and serum alanine aminotransferase (ALT) levels were measured serially. Generally we observed no difference in serum HCV RNA, HGV RNA, or TTV DNA concns. between samples obtained before and after initiation of HAART, whereas HIV

RNA concentration decreased and CD4 counts increased in most patients.

However,

two patients had markedly decreased concns. of HCV RNA and HGV RNA, resp., more than 12 mo after beginning HAART. Normalization of serum ALT levels was observed in a patient with decline of HCV RNA concns. No interactions were observed among these four viruses. HAART had no apparent direct effects on HCV, HGV, or TTV. Further studies will be required to elucidate whether the restoration of immune status through suppression of HIV replication by HAART may affect HCV or HGV RNA concns.

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
	+=====	+=====	+=====	:+====================================	+=====================================
Carpenter, C	1996 1997	1349	1146	J Am Med Assoc	MEDLINE
Carr, A		•	1995	Lancet	MEDLINE
Collier, A	•	334	1011	N Engl J Med	HCAPLUS
Cribier, B	1995	19	1131	AIDS	HCAPLUS
De Milito, A		157	140	J Med Virol	HCAPLUS
Devereux, H	1998	156	316	J Med Virol	MEDLINE
Dille, B		1175	458	J Infect Dis	HCAPLUS
Eyster, M		84	1020	Blood	MEDLINE
Fialaire, P	•	1180	1574	J Infect Dis	MEDLINE
Garcia-Samaniego, J	1998	128	1526	J Hepatol	MEDLINE
Goubau, P	1999	57	1367	J Med Virol	MEDLINE
Hammer, S	1997	1337	725	N Engl J Med	HCAPLUS
Hanley, J	1998	79	291	Thromb Haemost	HCAPLUS
Heid, C	11996	16	1986	Genome Res	HCAPLUS
Inoue, K	11999	130	1801	J Hepatol	MEDLINE
Kato, T	12000	138	94	J Clin Microbiol	HCAPLUS
Kato, T	11998	55	109	J Med Virol	HCAPLUS
Kihara, M	11997	14	 S3	J Acq Immun Def Sync	11
Kinoshita, T	1997	175	454	J Infect Dis	MEDLINE
Linnen, J	1996	271	1505	Science	HCAPLUS
Lipsky, J	1996	348	1800	Lancet	HCAPLUS
Markowitz, M	1995	1333	1534	N Engl J Med	HCAPLUS
Muerhoff, A	11996	125	1379	J Hepatol	HCAPLUS
Mushahwar, I		196	3177	Proc Natl Acad Sci U	J HCAPLUS
Nakao, H		233	143	Virology	HCAPLUS
Nishizawa, T		241	192	Biochem Biophys Res	•

```
Okamoto, H
                                           |1998 |10
                                                                 11
                                                                              |Hepatol Res
   Okamoto, H
Okamoto, H
                                          |1996 |57
                                                                 131
                                                                              |J Virol Meth
                                                                                                                  | HCAPLUS
                                          |1990 |60
                                                                 1215
                                                                             |Jpn J Exp Med
                                                                                                                  MEDLINE
   Perez-Olmeda, M
                                          |2000 |14
                                                                  1212
                                                                              AIDS
                                                                                                                   MEDLINE
   Prescott, L
                                          |1998 |339 |776
                                                                             |N Engl J Med
                                                                                                                  MEDLINE
                                                                             Lancet
   Rizzieri, D
                                         |1997 |349 |775
                                                                                                                   IMEDLINE
                                     Rockstroh, J
                                                                             IAIDS
                                                                                                                   IMEDLINE
   Rutschmann, O
Simmonds, P
                                                                              |J Infect Dis
                                                                                                                   IHCAPLUS
   | Inepatology | 
                                                                 |1321 |Hepatology
                                                                                                                   MEDLINE
                                                                                                                   | HCAPLUS
                                                                                                                   HCAPLUS
IMEDLINE
                                                               | 1370 | J Med Virol | HCAPLUS | 1539 | J Infect Dis | MEDLINE | 1332 | Clin Infect Dis | MEDLINE
                                         |1999 |38 |198
                                                                             |J Infect
                                                                                                                   IMEDLINE
                                                               1242
                                                                             |Thromb Haemost
                                                                                                                   HCAPLUS
                                                               |4293 |Blood
                                                                                                                    | HCAPLUS
                                          |1999 |105 |1114 |Br J Haematol
                                                                                                                   MEDLINE
                                                                              |Lancet
                                          |1996 |347 |558
                                                                                                                   MEDLINE
                                         |1999 |353 |932
                                                                               Lancet
                                                                                                                   MEDLINE
                                                                 |1104 |Clin Infect Dis
                                                                                                                  MEDLINE
   L37 ANSWER 24 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
            2002:107667 HCAPLUS
   DN
            136:145568
   TΙ
            Improved tolerance to anti-viral and anti-tumor chemotherapy by
            administration of erythropoietin
            Itri, Loretta; Bowers, Peter
   IN
            Ortho-McNeil Pharmaceutical, Inc., USA
            PCT Int. Appl., 56 pp.
            CODEN: PIXXD2
   DT
            Patent
            English
   FAN.CNT 1
            PATENT NO. KIND DATE APPLICATION NO. DATE
            WO 2002010743 A1 20020207 WO 2001-US24426 20010801 <--
   PΙ
                   W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                          CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                          GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
                          LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
                          RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
                          VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                   RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
                          DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
                          BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                                            CA 2001-2417550 20010801 <--
            CA 2417550 AA
                                                            20020207
                                                                                                               20010801 <--
20010801 <--
                                                                             US 2001-921516
EP 2001-959497
            US 2002052317
                                                             20020502
                                                A1
            EP 1325324
                                                A1
                                                          20030709
                   R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                          IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
   JP 2004505114 T2 20040219 J
BR 2001013179 A 20040622 B
ZA 2003001634 A 20040622 Z
PRAI US 2000-222538P P 20000802 <--
WO 2001-US24426 W 20010801 <--
                                                                             JP 2002-516619
                                                                              JP 2002-516619
BR 2001-13179
ZA 2003-1634
                                                                                                                          20010801 <--
                                                                                                                         20010801 <--
                                                                             ZA 2003-1634
                                                                                                                          20030227 <--
            The present invention provides methods using erythropoietin to improve the
   AΒ
            tolerance of anti-viral and anti-tumor chemotherapeutic regimens containing
```

interferon. The invention also described improved methods to treat chronic HCV by adjusting the dose of ribavirin to tailor the active dose of the drug while supporting the Hb levels in the patient with EPO. The present invention also provides anti-viral dosing regimens, particularly for chronic HCV comprising administration of an interferon containing anti-viral medicament, EPO, and a compound that reduces the amount of active tumor necrosis factor in the subject.

3056-17-5, Stavudine 7481-89-2, Zalcitabine
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study);

USES (Uses)
 (improved tolerance to anti-viral and anti-tumor chemotherapy by
 administration of erythropoietin)

RN 3056-17-5 HCAPLUS

ΙT

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Referenced Author (RAU)	Year VO: (RPY) (RV:	L) (RPG)	, , , , , , , , , , , , , , , , , , , ,	Referenced File
Akpek, G	=+ ==== +==== 1999 86	==+===== 1368	++====================================	HCAPLUS
Aviles, A	11995 10	1273	Cancer Biother	HCAPLUS
Bajorin, D	2000 88	11671	Cancer	HCAPLUS
Bourantas, K	1996 96	179	Acta Haematol	HCAPLUS
Cortes, J	1996 100	1452	American Journal of	MEDLINE
Hilbe, W	1999 102	199	Acta Haematol	HCAPLUS
Hinotsu, S	1999 86	11818	Cancer	MEDLINE
McPherson, E	2000 96	7B	Suppression of Hepat	: [
Naglieri, E	1998 3B	2021	Anticancer Research	· .
Peuckmann, V	12000 60	1273	Drugs	HCAPLUS
Pronzato, P	1995 15	12679	Anticancer Res	HCAPLUS
Reichard, O	1997 26	108S	Hepatology	1
Tetreault, S	1999 35	1347	Leukemia and Lymphom	NEDLINE

Trimble, E

|2000 |27 |24 |Seminars in Oncology|MEDLINE

L37 ANSWER 25 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:69299 HCAPLUS

DN 136:272695

TI Hepatotoxicity associated with nevirapine or efavirenz-containing antiretroviral therapy: Role of **hepatitis C** and B infections

AU Sulkowski, Mark S.; Thomas, David L.; Mehta, Shruti H.; Chaisson, Richard E.; Moore, Richard D.

CS Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, 21205, USA

SO Hepatology (Philadelphia, PA, United States) (2002), 35(1), 182-189
CODEN: HPTLD9; ISSN: 0270-9139

PB W. B. Saunders Co.

DT Journal

LA English

AB Hepatologists are frequently asked to evaluate human immunodeficiency virus (HIV)-infected patients with abnormal liver enzymes and to assess the causal role of medications, such as antiretroviral drugs. Recently, the use of HIV-1 specific non-nucleoside reverse transcriptase inhibitors (NNRTIs), including nevirapine (NVP) and efavirenz (EFV), has been associated with severe hepatic injury. We prospectively studied the incidence of severe hepatotoxicity (grade 3 or 4 change in alanine or aspartate transaminase levels) among 568 patients receiving NNRTI-containing antiretroviral therapy, including 312 and 256 patients prescribed EFV and NVP, resp. Hepatitis C virus (HCV

) and hepatitis B virus (HBV) were detected in 43% and 7.7% of patients, resp. Severe hepatotoxicity was observed in 15.6% of patients prescribed NVP and 8.0% of those prescribed EFV, but only 32% of NVP and 50% of EFV-associated episodes were detected during the first 12-wk of therapy. The risk was significantly greater among persons with chronic viral hepatitis (69% of cases) and those prescribed concurrent protease inhibitors (PIs) (82% of cases). Nonetheless, 84% of patients with chronic HCV or HBV did not experience severe hepatotoxicity. Severe hepatotoxicity occurs throughout the course of NNRTI therapy and is more common among patients prescribed nevirapine, those coinfected with HCV or HBV, and those coadministered protease inhibitors.

IT 3056-17-5, Stavudine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nevirapine- or efavirenz-containing antiretroviral therapy: hepatotoxicity in HIV patients infected with HBV or **HCV**)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RETABLE					
	Year	VOL	l PG	Referenced Work	Referenced
	(RPY)			(RWK)	File
	+=====	+====-	+=====·	+======================================	+=======
Albrecht, M	2001	•			HCAPLUS
•	2001	115	1579	AIDS	HCAPLUS
•	2001]		Program and abstract	
	1999				MEDLINE
· · · · · · · · · · · · · · · · · · ·	2001				MEDLINE
	1997		•		MEDLINE
	2001		•		MEDLINE
	1999		•		MEDLINE
•	12000			•	MEDLINE
·	12000	•	•		HCAPLUS
•	12001		•	1st Internationa	
Dupont Pharmaceuticals				Efavirenz (Sustiva)	
	11996				HCAPLUS
-	2001				MEDLINE
	1999	•		Program and abstract	
	12001				HCAPLUS
	1998			•	HCAPLUS
	12000				MEDLINE
5 ·	2001				MEDLINE
	2001		'	•	HCAPLUS
	12001			•	HCAPLUS
	2001			•	HCAPLUS
	11999				MEDLINE
	2001	•		1st Internationa	IMPDITUD
•			•	•	MEDLINE
J .				•	MEDLINE
· · · · · · · · · · · · · · · · · · ·	11998				HCAPLUS
•					MEDLINE
	2001				HCAPLUS
	2001 1998			J Acquir Immune Defi N Engl J Med	HCAPLUS
	2000			Hepatology	
· · · · · · · · · · · · · · · · · · ·					! MEDLINE
	2001				IMEDPINE
	11998		•		HCAPLUS
	2001				MEDLINE
	1999				MEDLINE
	2001			1st Internationa	INECHINE
	2001			J Acquir Immune Defi	I HCAPT.IIS
	11998			-	MEDLINE
Roxane Laboratories Inc		1 1 2		Nevirapine (Viramune	•
		177		=	HCAPLUS
	1999				HCAPLUS
	12000			•	MEDLINE
	11999				HCAPLUS
Sulkowski, M				Clin Infect Dis	
	2000			•	HCAPLUS
Thomas, D	2000				MEDLINE
					MEDLINE
Veronese, L				Antimicrob Agents Ch	
				_	HCAPLUS
	1996				MEDLINE
,					

L37 ANSWER 26 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN AN 2001:935354 HCAPLUS

```
136:64094
DN
ΤI
    The use of synthetic, non-hormonal 21-aminosteroids, derivatives,
    metabolites, and precursors thereof in the treatment of viral infections
IN
    Prendergast, Patrick Thomas
    Kotze, Gavin Salomon, S. Afr.
SO
    PCT Int. Appl., 47 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LA
FAN.CNT 1
    PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
    -----
                        ----
                               _____
                                           -----
                                                                  _____
PΙ
    WO 2001097749
                        A2
                               20011227
                                           WO 2001-IB1101
                                                                  20010622 <--
    WO 2001097749
                        A3
                               20020523
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    AU 2001074383
                         Α5
                               20020102
                                         AU 2001-74383
                                                                  20010622 <--
PRAI IE 2000-511
                               20000623
                                         <--
                         Α
    IE 2001-275
                               20010321
                                         <--
                         Α
                               20010622 <--
    WO 2001-IB1101
                         W
    The invention discloses the use of synthetic, non-hormonal
AΒ
    21-aminosteroids, derivs., metabolites, and precursors thereof in the
    treatment of viral infections, particularly hepatitis and
    retroviral infection by HIV. Synthetic non-hormonal 21-aminosteroids are
    disclosed for use in the prophylaxis and therapy of hepatitis
    viral infections. These compds. can be administered alone or in
    combination with conventional antiviral agents.
IT
    3056-17-5, d4T 7481-89-2, DdC
    RL: PAC (Pharmacological activity); THU (Therapeutic
    use); BIOL (Biological study); USES (Uses)
        (aminosteroids, derivs., metabolites, and precursors for treatment of
       viral infection, and use with other agents)
    3056-17-5 HCAPLUS
RN
CN
    Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L37 ANSWER 27 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:866574 HCAPLUS

DN 136:177515

TI Decrease of elevated N,N-dimethylglycine and N-methylglycine in human immunodeficiency virus infection during short-term highly active antiretroviral therapy

AU Look, Markus P.; Riezler, Reiner; Berthold, Heiner K.; Stabler, Sally P.; Schliefer, Kirsten; Allen, Robert H.; Sauerbruch, Tilman; Rockstroh, Jurgen K.

CS Department of Internal Medicine I, University of Bonn, Bonn, 53105, Germany

SO Metabolism, Clinical and Experimental (2001), 50(11), 1275-1281 CODEN: METAAJ; ISSN: 0026-0495

PB W. B. Saunders Co.

DT Journal

LA English

This study investigates fasting serum levels of methionine and related AB metabolites, vitamin B6, and folate during highly active antiretroviral therapy in therapy-naive human immunodeficiency virus (HIV)-1-infected outpatients. The research design consisted of before and during therapy measurements with a median treatment period of 100 days (range, 50 to 188) in frozen samples. The subjects included 17 consecutive HIV-1-infected outpatients (15 men and 2 women; 25 to 65-yr-old). Controls were 42 healthy individuals (28 men and 14 women; 24- to 82-yr-old) without serol. evidence of HIV and/or hepatitis C infection and normal clin. chemical Subjects received treatment with the reverse transcriptase inhibitors, azidothymidine (AZT) or stavudine (D4T) plus lamivudine (3TC) and either the protease inhibitors, indinavir (IND), nelfinavir (NELF), ritonavir (RITV), or saquinavir (SAQ) at the standard dosage. Serum concns. of methionine, total homocysteine (tHcy), cystathionine (CYSTA), N, N-dimethylglycine (DMG), N-methylglycine (MG), methylmalonic acid (MMA), and total cysteine, as well as vitamin B6, folate, and soluble tumor necrosis factor receptor p75 were taken at baseline and during highly active antiretroviral therapy. Baseline, serum tHcy, MMA, CYSTA, vitamin B6 concns. were not significantly different from healthy controls. There was, however, a trend towards lower folate serum concns. at baseline in HIV-infected patients as compared with healthy controls (P = .06). There were no significant correlations between tHcy and vitamin B6, folate, or MMA. Elevated baseline levels of DMG and MG decreased significantly during antiretroviral therapy (P = .0019 and .04, resp.), whereas no significant changes in serum concns. of CYSTA, MMA, or methionine were detected. They increased in 12 of 17 patients (P = .09). HIV-infected patients displayed significant alterations (elevated DMG and MG serum concns.) in metabolite levels of the betaine pathway in methionine metabolism, which might be pos. influenced by newly initiated antiretroviral combination therapy.

IT **3056-17-5**, Stavudine

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(levels of methionine and related metabolites, vitamin B6 and folate in HIV-infected humans during short-term highly active antiretroviral therapy)

RN

3056-17-5 HCAPLUS
Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (-).

(RAU)	(RPY)	(RVL)	(RPG)	Referenced Work (RWK) +==========	Referenced File
	1996			Eur J Clin Pharmacol	
	1993				HCAPLUS
	1991			J Acquir Immune Defi	MEDLINE
·	1999			AIDS	
	1999			J Intern Med	HCAPLUS
Breitkreutz, R	2000	16	203	AIDS Res Hum Retrovi	HCAPLUS
Buhl, R	1989	2			MEDLINE
Burgunder, J	1987	117	408	Eur J Clin Invest	MEDLINE
	1998				HCAPLUS
Carpenter, C	11998	280	78	JAMA	HCAPLUS
	1998	351	1881	Lancet	HCAPLUS
Castagna, A	11995	45	1678	Neurology	MEDLINE
Centers For Disease Con	1993	41	1	MMWR Morb Mortal Wkl	
	1999	13	2251	AIDS	HCAPLUS
Corrales, F	1991	14	528	Hepatology	HCAPLUS
de Quay, B	1992	6	305	AIDS	
den Heijer, M	1996	334	759	N Engl J Med	MEDLINE
Eck, H	1989	370	101	Biol Chem Hoppe-Seyl	HCAPLUS
Eikelboom, J	1999	131	363	Ann Intern Med	HCAPLUS
Folsom, A	1998	98	204	Circulation	HCAPLUS
Fugakawa, N	1998	68	380	Am J Clin Nutr	
Gallet, B	11998	351	1958	Lancet	MEDLINE
Henry, K	1998	351	1328	Lancet	MEDLINE
Hortin, G	1994	40	785	Clin Chem	MEDLINE
Kang, S	1991	48	536	Am J Hum Genet	MEDLINE
	1991		935	Lancet	MEDLINE
	1998		1342	J Nutr	HCAPLUS
	11998			Lancet	MEDLINE
	11994			Alcohol Alcohol	
Look, M	12000	16	1215	AIDS Res Hum Retrovi	HCAPLUS
Look, M	1997				MEDLINE
Look, M	12000	35	866	Scand J Gastroentero	HCAPLUS
	2001	285	1444	JAMA	MEDLINE
Mato, J	1999	30	1081	J Hepatol	HCAPLUS
	11983				HCAPLUS
	1995		1279	The Metabolic and Mo	
Muller, F	1996	63	242	Am J Clin Nutr	MEDLINE

```
Naurath, H
                       |1995 |346
                                   185
                                           Lancet
                                                                 IHCAPLUS
Nygard, O
                       |1997 |337
                                   1230
                                           |N Engl J Med
                                                                 MEDLINE
                       |1995 |19
Pace, G
                                    1523
                                           |Free Radic Biol Med | HCAPLUS
                       |1995 |22
Perry, I
                                    11395
                                          Lancet
                       |1992 |55
                                                                 | HCAPLUS
Selhub, J
                                    1131
                                           |Am J Clin Nutr
Selhub, J
                       |1995 |332
                                   1286
                                           |N Engl J Med
                                                                 MEDLINE
                       |1996 |12
                                   75
Skurnick, J
                                           | J Aquir Immune Defic | MEDLINE
                                   807
Staal, F
                       |1992 |8
                                           |AIDS Res Hum Retrovi|
                       |1993 |81
Stabler, S
                                   13404
                                          |Blood
                                                                 MEDLINE
                       |1997 |175
Stein, D
                                   11161
                                          |J Infect Dis
Ubbink, J
                       1999 | 70
                                   1789
                                           |Am J Clin Nutr
                                                                 | HCAPLUS
Ubbink, J
                       11985 | 342
                                   1277
                                           | J Chromatogr
                                                                 | HCAPLUS
Ubbink, J
                       |1996 |98
                                   177
                                           |J Clin Invest
                                                                 | HCAPLUS
van der Ven, A
                       |1998 | 28
                                    |187
                                           |Eur J Clin Invest
                                                                IMEDLINE
```

- L37 ANSWER 28 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2001:838939 HCAPLUS
- DN 136:144717
- TI Interferon and ribavirin combination therapy for chronic hepatitis C in human immunodeficiency virus-infected patients with congenital coagulation disorders
- AU Sauleda, Silvia; Juarez, Alberto; Esteban, Juan I.; Altisent, Carmen; Ruiz, Isabel; Puig, Lluis; Esteban, Rafael; Guardia, Jaime
- CS Centre de Transfusio i Banc de Teixits, Servei Catala de la Salut, Hospital Universitari Vall d'Hebron, Universitat Autonoma de Barcelona, Barcelona, 08035, Spain
- SO Hepatology (Philadelphia, PA, United States) (2001), 34(5), 1035-1040
 CODEN: HPTLD9; ISSN: 0270-9139
- PB W. B. Saunders Co.
- DT Journal
- LA English
- We have conducted an open, prospective trial to assess the safety and efficacy of interferon alfa-2b and ribavirin in combination for the treatment of chronic hepatitis C in human immunodeficiency virus (HIV)-infected hemophiliacs. Twenty hemophiliacs coinfected with HIV and hepatitis C virus (HCV), 18 of them under highly active antiretroviral therapy (HAART), with a mean CD4+ cell count of 490 ± 176 cells/mm3 and undetectable (n = 9) or low-level HIV RNA (<10,000 copies/mL; n = 11), were treated with interferon-alpha2b (3 MU thrice weekly) and ribavirin (800 mg/d) for 6 or 12 mo according to virol. response. Patients were monitored for tolerance and response at 4, 8, 12, 24, 36, and 48 wk during treatment and every other month thereafter. All 20 patients enrolled completed at least 6 mo of treatment with no major side effect requiring treatment withdrawal, dose reduction, or modification of HAART. Overall, 8 patients (40%) achieved a sustained virol. response at the end of the 6-mo post-treatment follow-up. Sustained responders had lower baseline HCV-RNA levels (5.7 \pm 0.8 vs. 6.3 \pm 0.4 log10 IU/mL, P = .041) but were otherwise similar to nonresponders. All sustained responders had a decrease in HCV-RNA level of at least 1 log per mo during the first 2 mo and undetectable levels at 6 mo. In conclusion, our results provide evidence that combination therapy with interferon and ribavirin is safe in HIV-infected hemophiliacs with stable CD4 cell count and undetectable or low-level HIV replication, and leads to eradication of HCV in 40% of these patients.
- IT 3056-17-5, Stavudine
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (interferon and ribavirin combination therapy for chronic

hepatitis C in HIV infected humans with congenital
coagulation disorders)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RETABLE

Defended Buthous	137	1.707	1 DC	1 D-f 1 M1	1 5 6 1
Referenced Author	•	•	PG	·	Referenced
(RAU)			(RPG)	(RWK)	File
		-	•	·	•
Causse, X	12000			J Hepatol	HCAPLUS
Darby, S			11425	·	MEDLINE
Davis, G	11998	339	11493		HCAPLUS
Dieterich, D	1999			50th AASLD Annua	
Dieterich, D	11999		179S	•	MEDLINE
Eyster, M	11993		1602	J Acquir Immune Defi	•
Greub, G	12000		1800	•	MEDLINE
John, M	11998		2289	AIDS	HCAPLUS
Landau, A	12000		1857	AIDS	HCAPLUS
Landau, A	12000	14	839	AIDS	HCAPLUS
Lessens, O	1999	•		J Infect Dis	1 =
Makris, M	1996	194	746	Br J Haematol	MEDLINE
Martin, P	1989	197	1559	Gastroenterology	MEDLINE
McHutchinson, J	12000	1		51st AASLD Annua	
McHutchison, J	1998	339	1485	N Engl J Med	HCAPLUS
Morsica, G	12000	14	1656	AIDS	HCAPLUS
Puoti, M	12000	181	12033	J Infect Dis	MEDLINE
Rockstroh, J	11996	91	12563	Am J Gastroenterol	MEDLINE
Sauleda, S	12000	183	1807	Thromb Haemost	HCAPLUS
Sim, S	11998	14	1661	AIDS Res Hum Retrovi	HCAPLUS
Soriano, V	11996	123	1585	Clin Infect Dis	IHCAPLUS
Sulkowski, M	12000				HCAPLUS
Tedder, R	11991	179	512	Br J Haematol	MEDLINE
Telfer, P	11994			Br J Haematol	MEDLINE
Troisi, C	-		1412	IBlood	1
Vogt, M	11987	•		Science	HCAPLUS
Zybelberg, H	11998			Clin Infect Dis	
Zylberberg, H	12000	•	694	Gut	HCAPLUS

L37 ANSWER 29 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:808478 HCAPLUS

DN 136:114686

TI Hepatitis C Virus NS3 NTPase/Helicase:

Different Stereoselectivity in Nucleoside Triphosphate Utilisation Suggests that NTPase and Helicase Activities are Coupled by a Nucleotide-dependent Rate Limiting Step

AU Locatelli, Giada A.; Gosselin, Gilles; Spadari, Silvio; Maga, Giovanni CS Istituto di Genetica Biochimica ed Evoluzionistica IGBE-CNR, Pavia, Italy SO Journal of Molecular Biology (2001), 313(4), 683-694 CODEN: JMOBAK; ISSN: 0022-2836

PB Academic Press

DT Journal

LA English

AB Hepatitis C virus (HCV) NS3

protein is a multifunctional enzyme, possessing protease, NTPase and helicase activities within a single polypeptide of 625 amino acid residues. These activities are essential for the virus life cycle and are considered attractive targets for anti-HCV chemotherapy. Beside ATP, the NS3 protein has the ability to utilize deoxynucleoside triphosphates (dNTPs) as the energy source for nucleic acid unwinding. We have performed an extensive anal. of the substrate specificities of both NS3 NTPase and helicase activities with respect to all four dNTPs as well as with dideoxynucleoside triphosphate (ddNTP) analogs, including both $D-(\beta)$ and $L-(\beta)$ -deoxy and dideoxy-nucleoside triphosphates. Our results show that almost all dNTPs and ddNTPs tested were able to inhibit hydrolysis of ATP by the NTPase activity, albeit with different efficiencies. Moreover, this activity showed almost no stereoselectivity, khe contrary, the helicase activity had more strict substrate selectivity, since, among $D-(\beta)$ -nucleotides, only ddTTP and its analog 2',3'-didehydro-thymidine triphosphate could be used as substrates with an efficiency comparable to ATP, whereas among $L-(\beta)$ -nucleotides, only $L-(\beta)-dATP$ was utilized. Comparison of the steady-state kinetic parameters for both reactions, suggested that dATP, L- (β) -dCTP and $L-(\beta)$ -dTTP, specifically reduced a rate limiting step present in the helicase, but not in the NTPase, reaction pathway. These results suggest that NS3-associated NTPase and helicase activities have different sensitivities towards different classes of deoxy and dideoxy-nucleoside analogs, depending on a specific step in the reaction, as well as show different enantioselectivity for the D-(β) and L-(β)conformations of the sugar ring. These observations provide an essential mechanistic background for the development of specific nucleotide analogs targeting either activity as potential anti-HCV agents. (c) 2001 Academic Press.

IT 611-60-9, DdTTP 26194-89-8, 2',3'-Didehydro-3'-deoxythymidine 5'-triphosphate 66004-77-1, DdCTP 161170-30-5

RL: BSU (Biological study, unclassified); BIOL (Biological study) (stereoselectivity of hepatitis C virus
NS3 NTPase/helicase suggests NTPase and helicase activities are coupled by nucleotide-dependent rate limiting step)

RN 611-60-9 HCAPLUS

CN Thymidine 5'-(tetrahydrogen triphosphate), 3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 26194-89-8 HCAPLUS

CN Thymidine 5'-(tetrahydrogen triphosphate), 2',3'-didehydro-3'-deoxy- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

RN 66004-77-1 HCAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 161170-30-5 HCAPLUS

CN Triphosphoric acid, P-[[(2R,5S)-5-(4-amino-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL) (RPG)	, , , , , , , , , , , , , , , , , , , ,	Referenced File
Bartenschlager, R	=+======= 1995 69	=+===== 7519	=+====================================	HCAPLUS
Borowski, P	2001 75	3220	J Virol	HCAPLUS
Bujalowski, W	12000 39	12106	Biochemistry	HCAPLUS
Butkiewicz, N	1996 225	1328	Virology	HCAPLUS
Choo, Q	1991 88	12451	Proc Natl Acad Sci	U HCAPLUS
Choo, Q	1989 244	1359	Science	HCAPLUS
Clarke, B	1997 78	12397	J Gen Virol	HCAPLUS
Gallinari, P	1998 72	16758	J Virol	HCAPLUS
Gorbalenya, A	1993 3	1419	Curr Opin Struct B	io HCAPLUS
Gwack, Y	1996 225	1654	Biochem Biophys Rea	s HCAPLUS
Gwack, Y	1997 250	47	Eur J Biochem	HCAPLUS

jan delaval - 28 june 2006

```
Jin, L
                       |1995 |323
                                   147
                                           |Arch Biochem Biophys|HCAPLUS
Kim, J
                       |1998 |6
                                    189
                                           Structure
                                                                 | HCAPLUS
Kwong, A
                       |1999 |41
                                    167
                                           |Antiviral Res
                                                                 IMEDLINE
                       |2000 |242
                                   1171
                                           |Curr Top Microbiol I|HCAPLUS
Kwong, A
Levin, M
                       |1999 |274
                                   |31839 |J Biol Chem
                                                                 HCAPLUS
                       11999 | 73
                                    |8798 |J Virol
Lin, C
                                                                 | HCAPLUS
Lohman, T
                       |1996 |65
                                    1169
                                           |Annu Rev Biochem
                                                                 | HCAPLUS
                       |1994 |302
                                   1279
Maga, G
                                           |Biochem J
                                                                 | HCAPLUS
Maga, G
                       |1999 |27
                                   1972
                                           |Nucl Acids Res
                                                                 | HCAPLUS
Maga, G
                       |1999 |18
                                   1795
                                           |Nucleos Nucleot
                                                                 | HCAPLUS
                                   R227
Marians, K
                       |2000 |8
                                           |Struct Fold Des
                                                                 | HCAPLUS
Markland, W
                       |1997 |78
                                   |39
                                           |J Gen Virol
                                                                 | HCAPLUS
Paolini, C
                       |2000 |81
                                   |1335
                                          |J Gen Virol
                                                                 | HCAPLUS
Patel, S
                       |2000 |69
                                   |651
                                           |Annu Rev Biochem
                                                                 | HCAPLUS
Preugschat, F
                       |1996 |271
                                   |24449 |J Biol Chem
                                                                 IHCAPLUS
                       |2000 |303 |773
Rajendran, S
                                          |J Mol Biol
                                                                 | HCAPLUS
Spadari, S
                       |1995 |77
                                   1861
                                           |Biochimie
                                                                 | HCAPLUS
                       |1995 |47
Spadari, S
                                   |1231 |Mol Pharmacol
                                                                 | HCAPLUS
                       |2001 |29
Tackett, A
                                   1565
                                           |Nucl Acids Res
                                                                 | HCAPLUS
Tai, C
                      |1996 |70
                                   18477
                                          |J Virol
                                                                 IHCAPLUS
Utama, A
                       |2000 |273
                                   1316
                                           |Virology
                                                                 | HCAPLUS
Walker, M
                       |1999 |4
                                   |518
                                           |Drug Discov Today
                                                                 HCAPLUS
                       |1999 |80
Wardell, A
                                    1701
                                           |J Gen Virol
                                                                 HCAPLUS
Yan, Y
                       |1998 |7
                                    1837
                                           |Protein Sci
                                                                 HCAPLUS
Yao, N
                       |1999 |7
                                    |1353
                                          |Struct Fold Des
                                                                 HCAPLUS
Yong, Y
                       |1995 |270
                                   |24509 | J Biol Chem
                                                                 HCAPLUS
```

- L37 ANSWER 30 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2001:784185 HCAPLUS
- DN 136:95621
- TI Low frequency of severe hepatotoxicity and association with HCV coinfection in HIV-positive patients treated with HAART
- AU Monforte, Antonell d'Arminio; Bugarini, Roberto; Pezzotti, Patrizio; De Luca, Andrea; Antinori, Andrea; Mussini, Cristina; Vigevani, Gian Marco; Tirelli, Umberto; Bruno, Raffaele; Gritti, Francesco; Piazza, Marcello; Chigiotti, Silvia; Chirianni, Antonio; De Stefano, Carlo; Pizzigallo, Eligio; Perrella, Oreste; Moroni, Mauro
- CS ICONA Study Group, Institute of Infectious and Tropical Diseases, L Sacco H, University of Milan, Milan, 20157, Italy
- SO JAIDS, Journal of Acquired Immune Deficiency Syndromes (2001), 28(2), 114-123
 CODEN: JJASFJ
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- Highly active antiretroviral therapy (HAART) is strongly effective in AΒ reducing morbidity and mortality in HIV-1-pos. individuals. Its main drawback is the potential toxicity. Data on the frequency and determinants of severe hepatotoxicity in a clin. setting are still sparse. This is a prospective study of HIV-1-pos. individuals with known HBsAg and HCV-Ab serol. The study end point was progression to alanine aminotransferase (ALT) levels ≥200 IU/L after HAART initiation. Cumulative probability of progression to this end point was estimated by the Kaplan-Meier method. Crude and adjusted hazard ratios (HR) were estimated by proportional hazards regression model. One thousand two hundred fifty-five patients were included. HBsAg was found in 91 (7.2%), HCV-Ab in 578 (46.5%) patients; almost all injection drug users (451 of 482; 93.6%) were HCV-Ab pos. Sixty-one individuals progressed to the end point with a probability of 7.9% (95% confidence interval [CI], 5.6-10.0) of progression at 24 mo from starting.

Independent factors predicting progression to the end point were baseline ALT levels (HR, 5.29; 95% CI, 3.24-8.65; every 10 IU/L higher), HCV-Ab positivity (HR, 4.01; 95% CI, 1.48-10.85) or both HBsAg and HCV-Ab positivity (HR, 3.85, 95% CI, 1.01-14.61), and previous non-HAART therapy (HR, 1.84, 95% CI, 1.04-3.42). Patients receiving stavudine-containing regimens had a lower risk than those receiving zidovudine-containing regimens (HR, 0.30, 95% CI, 0.12-0.71). There was a low risk of ALT \geq 200 IU/L in the authors' cohort. Hepatitis C coinfection and elevated ALT levels at HAART initiation are important predictors of progression to ALT \geq 200 IU/L; stavudine-containing regimens were associated with a lower risk compared with zidovudine-containing regimens.

IT 3056-17-5, Stavudine 7481-89-2, Zalcitabine

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(low frequency of severe hepatotoxicity and association with HCV coinfection in HIV-pos. humans treated with HAART)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Referenced Author (RAU)	(RPY) (RVL) (RPG)	• •	Referenced File
Anon	2000 1	76	HIV Medicine	
Arribas, J	1998 12	1722	AIDS	MEDLINE
Carpenter, C	12000 1283	381	JAMA	MEDLINE
Carr, A	1998 12	F51	AIDS	MEDLINE
Carr, A	1999 353	12093	Lancet	MEDLINE
Centers for Disease	Con 1992 41	19	MMWR Morb Mortal	Wkl
den Brinker, M	2000 14	12895	AIDS	HCAPLUS
Garfein, R	1996 86	1655	Am J Pub Health	MEDLINE
Giusti, G	1989 17	1237	Infection	MEDLINE

```
John, M
                       |1998 |12
                                    12289
                                           AIDS
                                                                  | HCAPLUS
                                           |Clin Infect Dis
Lee, B
                       |1992 |14
                                    1773
                                                                 |MEDLINE
Liang, K
                                    113
                       |1986 |73
                                            |Biometrika
Mele, A
                                            |Rapporti ISTISAN 96/|
                       |1996 |VII
                                    | 1
Mocroft, A
                       |1998 |352
                                    11725
                                           |Lancet
                                                                  IMEDLINE
Monforte d'A
                       |2000 |14
                                    1499
                                           IAIDS
Palella, F
                       |1998 |338
                                   853
                                           |N Engl J Med
Perrillo, R
                       |1986 |105
                                   13382
                                           |Ann Intern Med
Rodriguez-Rosado, R
                       |1998 |12
                                    11256
                                           |AIDS
                                                                 |MEDLINE
Rutschmann, O
                       |1998 |177
                                    1783
                                           |J Infect Dis
                                                                 | HCAPLUS
Sulkowski, M
                       |2000 |283
                                   174
                                           | JAMA
                                                                 | HCAPLUS
Thomas, D
                       |1998 |28
                                    1568
                                           |Hepatology
Vanhove, G
                       |1996 |276
                                   |1955
                                           JAMA
                                                                 |MEDLINE
Vento, S
                       |1998 |12
                                    |116
                                           |AIDS
                                                                 |MEDLINE
Zylberberg, H
                       |1998 | 26
                                    |1104 |Clin Infect Dis
                                                                 IMEDLINE
```

- L37 ANSWER 31 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2001:682395 HCAPLUS
- DN 135:366359
- TI Risk factors for severe hepatic injury after introduction of highly active antiretroviral therapy
- AU Nunez, Marina; Lana, Raquel; Mendoza, Juan Luis; Martin-Carbonero, Luz; Soriano, Vincent
- CS Service of Infectious Diseases, Hospital Carlos III, Instituto de Salud Carlos III, Madrid, Spain
- SO JAIDS, Journal of Acquired Immune Deficiency Syndromes (2001), 27(5), 426-431 CODEN: JJASFJ
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- AΒ Treatment of HIV infection with highly antiretroviral therapy (HAART) may be limited by liver toxicity. Its incidence and risk factors are not well known. Retrospective chart review. Naive patients beginning HAART between Jan. 1997 and Jan. 2000. Severe transaminase elevation was defined as fivefold or higher rise over upper normal limits, or as ≥3.5-fold rise above abnormal baseline values. Of 222 study subjects, 38%, 5%, and 2% were coinfected with hepatitis C virus (HCV), hepatitis B virus, and hepatitis D virus, resp. Besides two nucleoside reverse transcriptase inhibitors (NRTIs), 96 patients received protease inhibitors (PIs), 90 received nonnucleoside reverse transcriptase inhibitors (NNRTIs), and 35 received a PI + NNRTI combination. Severe hepatic injury developed in 21 (9%): 10% PI, 9%, and 9% PI + NNRTI. Both univariate and multivariate analyses identified alc. abuse, HCV coinfection, and older age as independent risk factors. Predictor variables in the final multivariate model were: alc. abuse (risk ratio [RR], 5.87; 95% confidence interval [CI], 1.49-23.15: p = .01), pos. HCV serol. (RR. 3.99; 95% CI, 1.32-12.10; p = .01), and older age (RR, 1.11; 95% CI, 1.04-1.18; p = 0.001). Nearly 10% of study subjects who start HAART experience severe transaminase elevation, irresp. of the treatment. Avoidance of alc. abuse, especially in study subjects coinfected with HCV, will reduce the risk of hepatic injury after HAART. When possible, prior treatment for chronic HCV infection should be considered.
- IT **3056-17-5**, Stavudine
 - RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (highly active antiretroviral therapy and risk factors for severe hepatic injury in HIV-infected humans)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RETABLE

Referenced Author (RAU)	(RPY)	(RVL)	(RPG)	(RWK)	Referenced
Aids Clinical Trials Gr			1	Table of grading sev	
Alonso, M	2000	•	481	Med Clin (Barc)	i
Barreiro, P	2000	114	807	AIDS	HCAPLUS
Benhamou, Y	1996	125	1705	Ann Intern Med	HCAPLUS
Brau, N	1997	349	1924	Lancet	MEDLINE
Cahn, P	12000	1	1	[abstract PL8.6] 5th	ĺ
Den Brinker, M	12000	14	12895	AIDS	HCAPLUS
Fortgang, I	1995	190	1433	Am J Gastroenterol	MEDLINE
Freiman, J	1993		379		MEDLINE
Gavazzi, G			1021	AIDS Res Hum Retrovi	HCAPLUS
John, M	1998		2289	AIDS	HCAPLUS
Kew, L	1991		283	Ann Intern Med	1
Landau, A	2000	•	839	·	HCAPLUS
Martinez, E	12000	•	1	(abstract PL8.5) 5th	
Morsica, G	12000		1656	AIDS	HCAPLUS
Moyle, G	11999	• -	473	Exp Opin Invest Drug	
Murphy, R	11996		1183	Exp Opin Invest Drug	
Perez-Olmeda, M	11999	•	308	J Acquir Immune Defi	
Pezzotti, P	12000	•	1	[abstract TuPpB1161]	
Piroth, L	12000		534		MEDLINE
Rodriguez-Rosado, R	11998	12	1256	AIDS	MEDLINE
Sanne, I	12000			[abstract PL9.3] 5th	
Sauleda, S	12000		A751	Hepatology	
Saves, M	11999		F115	AIDS	HCAPLUS
Saves, M	2000		3451	Antimicrob Agents Ch	
Sulkowski, M	12000		74	JAMA	HCAPLUS
Torriani, F	12000	12	168	AIDS Rev	1

```
L37 ANSWER 32 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
```

AN 2001:617821 HCAPLUS

DN 135:175348

TI Use of N-substituted-1,5-dideoxy-1,5-imino-D-glucitol compounds for treating **hepatitis** virus infections

IN Mueller, Richard A.; Bryant, Martin L.

PA Pharmacia Corporation, USA

SO PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

```
PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                 DATE
                               -----
                                          -----
     -----
                        ----
                                                                 _____
                        A1 20010823 WO 2001-US4512 20010213 <--
    WO 2001060366
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
            YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                        AU 2001-36938
EP 2001-909153
    AU 2001036938
                               20010827
                        Α5
                                                                 20010213 <--
    EP 1261339
                        Α1
                               20021204
                                                                 20010213 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                         JP 2001-559463
    JP 2003522791
                        Т2
                               20030729
                                                                 20010213 <--
    US 2005119310
                        Α1
                               20050602
                                          US 2002-203769
                                                                 20010213 <--
PRAI US 2000-182362P
                        P
                               20000214
                                        <--
                       W
    WO 2001-US4512
                              20010213
                                        <--
AΒ
    Provided are methods and compns. for treating hepatitis virus
    infections in mammals, especially humans. The methods comprise (1)
```

infections in mammals, especially humans. The methods comprise (1) administering N-substituted-1,5-dideoxy-1,5-imino-D-glucitol compds. alone or in combination with nucleoside antiviral agents, nucleotide antiviral agents, mixts. thereof, or immunomodulating/immunostimulating agents, or (2) administering N-substituted-1,5-dideoxy-1,5-imino-D-glucitol compds. alone or in combination with nucleoside antiviral agents, nucleotide antiviral agents, or mixts. thereof, and immunomodulating/immuno stimulating agents.

IT 3056-17-5, Stavudine 7481-89-2, Dideoxycytidine 121154-51-6 147058-39-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treatment of **hepatitis** B and C virus infections with dideoxyiminoglucitols and antiviral nucleosides and nucleotides) 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 121154-51-6 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 147058-39-7 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL)	(RPG)		Referenced File
Block, T	1998 4	610	NATURE MEDICINE	HCAPLUS
Block, T	1994 91	12235	PROCEEDINGS OF THE	N HCAPLUS
Dwek, R	1998	1	WO 9835685 A	HCAPLUS
Mueller, R	1999	1	WO 9940916 A	HCAPLUS
Mueller, R	12000	1	WO 0047198 A	HCAPLUS
Platt, F	1994	106	CHEMTRACTS ORGANIC	Cl
Searle & Co	1995	1	WO 9519172 A	HCAPLUS
Zitzmann, N	1999	1	WO 9929321 A	HCAPLUS
Zitzmann, N	1999 96	11878	PROCEEDINGS OF THE	N HCAPLUS

L37 ANSWER 33 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:617773 HCAPLUS

DN 135:175346

TI Method for the treatment or prevention of flavivirus infections using

```
nucleoside analogues
IN
     Ismaili, Hicham Moulay Alaoui; Cheng, Yun-Xing; Lavallee, Jean-Francois;
     Siddiqui, Arshad; Storer, Richard
PA
     Biochem Pharma Inc., Can.
SO
     PCT Int. Appl., 51 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
     -----
                         ____
                                -----
                                            -----
                                                                   _____
PΙ
     WO 2001060315
                         Α2
                                20010823
                                            WO 2001-CA197
                                                                   20010219 <--
     WO 2001060315
                         А3
                                20030116
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2400274
                          AΑ
                                20010823
                                            CA 2001-2400274
                                                                   20010219 <--
     AU 2001035278
                          Α5
                                20010827
                                            AU 2001-35278
                                                                   20010219 <--
     EP 1296690
                          A2
                                20030402
                                            EP 2001-907276
                                                                   20010219 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2003523978
                         Т2
                                20030812
                                            JP 2001-559414
                                                                   20010219 <--
     NZ 521210
                         Α
                                20041126
                                            NZ 2001-521210
                                                                   20010219 <--
     U<del>8 20</del>02019363
                         A1
                                20020214
                                            US 2001-785235
                                                                   20010220 <--
     US 6784161
                        В2
                                20040831
     ZA 2002006506
                        Α
                                20031114
                                            ZA 2002-6506
                                                                   20020814 <--
     NO 2002003884
                        Α
                                20021017
                                            NO 2002-3884
                                                                   20020816 <--
     US 2004248844
                         A1
                                20041209
                                            US 2004-887292
                                                                   20040709 <--
PRAI US 2000-183349P
                         Р
                                20000218
                                          <--
     WO 2001-CA197
                         W
                                20010219
                                          <--
     US 2001-785235
                         A1
                                20010220
                                          <--
OS
    MARPAT 135:175346
AΒ
     The present invention relates to a method for the treatment or prevention
     of Flavivirus infections using nucleoside analogs in a host comprising
     administering a therapeutically effective amount of the nucleoside analog or
     a pharmaceutically acceptable salt thereof.
IT
     611-60-9, 3'-Deoxythymidine-5'-triphosphate 3416-05-5,
     3'-Deoxythymidine
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (method for treatment or prevention of flavivirus infections using
        nucleoside analogs and their combination with other agents in relation
        to hepatitis C virus RNA-
        dependent RNA polymerase (NS5B protein))
RN
     611-60-9 HCAPLUS
CN
     Thymidine 5'-(tetrahydrogen triphosphate), 3'-deoxy- (9CI) (CA INDEX
```

Absolute stereochemistry.

NAME)

Me
$$\stackrel{\text{H}}{\underset{\text{N}}{\bigvee}}$$
 $\stackrel{\text{O}}{\underset{\text{O}}{\bigvee}}$ $\stackrel{\text{O}}{\underset{\text{O}}{\bigvee}}$ $\stackrel{\text{OPO}_3H_2}{\underset{\text{O}}{\bigvee}}$

RN 3416-05-5 HCAPLUS

CN Thymidine, 3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 9026-28-2, RNA-dependent RNA

polymerase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(method for treatment or prevention of flavivirus infections using nucleoside analogs and their combination with other agents in relation to hepatitis C virus RNA-

dependent RNA polymerase (NS5B protein))

RN 9026-28-2 HCAPLUS

CN Nucleotidyltransferase, ribonucleate, RNA-dependent (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L37 ANSWER 34 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:166174 HCAPLUS

DN 134:347992

TI Hepatitis B or hepatitis C virus

infection is a risk factor for severe hepatic cytolysis after initiation of a protease inhibitor-containing antiretroviral regimen in human immunodeficiency virus-infected patients

AU Saves, Marianne; Raffi, Francois; Clevenbergh, Philippe; Marchou, Bruno; Waldner-Combernoux, Anne; Morlat, Philippe; Le Moing, Vincent; Riviere, Catherine; Chene, Genevieve; Leport, Catherine; Leport, C.; Raffi, F.; Chene, G.; Salamon, R.; Moatti, J.-P.; Pierret, J.; Brun-Vezinet, F.; Fleury, H.; Peytavin, G.; Costagliola, D.; Dellamonica, P.; Katlama, C.; Meyer, L.; Morin, M.; Sicard, D.; Sobel, A.; Vincent-Ballereau, F.; Dupon, M.; Le Moing, V.; Marchou, B.; May, T.; Morlat, P.; Waldner-Combernoux, A.; Agid, F.; Bourdillon, F.; Delfraissy, J.-F.; Dormont, J.; Lacut, J.-Y.; Souteyrand, Y.; Vilde, J.-L.; Cailleton, V.; Carricaburu, D.; Deveaud, C.; Dupouy, G.; Dutoit, S.; Ecobichon, J.-L.; Egouy, C.; Jadand, C.; Joly, P.; Journot, V.; Lawson-Ayayi, S.; Lewden, C.; Masquelier, B.; Nouioua, W.; Palmer, G.; Saves, M.; Souville, M.; Chauvin, J. P.; Delavelle, D.; Dohin, E.; Gallet, B.; Gervais, M.-C.; Lapierre, D.; Schmit, J. L.; Chennebault, J.-M.; Faller, J.-P.; Estavoyer, J.-M.;

Laurent, R.; Vuitton, D.; Beylot, J.; Lacut, J.-Y.; Le Bras, M.; Ragnaud, J.-M.; Granier, P.; Garre, M.; Bazin, C.; Veyssier, P.; Devidas, A.; Sobel, A.; Portier, H.; Perronne, C.; Lagarde, P.; Ceccaldi, J.; Peyramond, D.; Allard, C.; Reynes, J.; Canton, P.; Raffi, F.; Cassuto, J.-P.; Dellamonica, P.; Arsac, P.; Bricaire, F.; Caulin, C.; Frottier, J.; Herson, S.; Imbert, J.-C.; Malkin, J.-E.; Rozenbaum, W.; Sicard, D.; Vachon, F.; Vilde, J.-L.; Becq-Giraudon, B.; Remy, G.; Cartier, F.; Lucht, F.; Roue, R.; Lang, J.-M.; Jaubert, D.; Massip, P.; Choutet, P.

CS INSERM Unite 330, Bordeaux, 33076, Fr.

SO Antimicrobial Agents and Chemotherapy (2000), 44(12), 3451-3455 CODEN: AMACCQ; ISSN: 0066-4804

PB American Society for Microbiology

DT Journal

LA English

AB In a cohort of 1,047 human immunodeficiency virus type 1-infected patients started on protease inhibitors (PIs), the incidence of severe hepatic cytolysis (alanine aminotransferase concentration five times or more above the upper limit of the normal level ≥ 5N) was 5% patient-years after a mean follow-up of 5 mo. Only positivity for hepatitis C virus antibodies (hazard ratio [HR], 7.95; P < 10-3) or hepatitis B virus surface antigen (HR, 6.67; P < 10-3) was associated with severe cytolysis. Before starting patients on PIs, assessment of liver enzyme levels and viral coinfections is necessary.

IT 3056-17-5. Stavudine 7481-89-2. Zalcitabine

IT 3056-17-5, Stavudine 7481-89-2, Zalcitabine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(hepatitis B or C virus infection as risk for severe hepatic cytolysis after initiation of protease inhibitor-containing antiretroviral regimen in HIV infection)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

```
RETABLE
   Referenced Author | Year | VOL | PG | Referenced Work | Referenced
        (RAU) | (RPY) | (RVL) | (RPG) | (RWK)
                                                              | File
Arribas, J | 1998 | 12 | 1722 | AIDS | MEDLINE
                      |1997 |349 |924 |Lancet
Brau, N
                                                              MEDLINE
                      | 1998 | 351 | 543 | Lancet | HCAPLUS | 1997 | 349 | 995 | Lancet | MEDLINE | 1996 | 334 | 1011 | N Engl J Med | HCAPLUS
                      |1998 |351 |543
Cameron, D
Carr, A
Collier, A
                      |1997 |349 |995
Division of AIDS, Natio|1996 | |
                                         |Division of AIDS tab|
Gulick, R |1997 |337 |734
                                         |N Engl J Med | HCAPLUS
                      |1997 |337 |725 |N Engl J Med
Hammer, S
                                                               | HCAPLUS
Havlir, D
                      |1998 |339 |1261 |N Engl J Med
                                                              | HCAPLUS
Jeurissen, F
                      |1998 |12 |441
                                          |AIDS
                                                                IMEDLINE
John, M
Karch, F
                                  |2289 |AIDS
                      |1998 |12
                                                                HCAPLUS
                 | 19// | 21 | 247 | 1997 | 350 | 364 | 11997 | 1150
                                          |Clin Pharmacol Ther |MEDLINE
Matsuda, J
                                          |Lancet
                                                               MEDLINE
Nelson, D
Pialoux, G
                     |1997 |158 |1473 |J Immunol
                                                               HCAPLUS

        Pialoux, G
        |1998 |339 |1269 |N Engl J Med
        |HCAPLUS

        Rutschmann, O
        |1998 |177 |783 |J Infect Dis
        |HCAPLUS

USPHS/IDSA Prevention 0|2000 |30 |S29
                                          |Clin Infect Dis
Vento, S | 1998 | 12 | 116
                                          |AIDS
                                                               MEDLINE
Vergis, E
                      |1998 |9
                                  153
                                          |Int J Sex Transm Dis|MEDLINE
Zylberberg, H | 1998 | 26
Zylberberg, H | 11998 | 127
                                  |1104 |Clin Infect Dis |MEDLINE
                                  |1255 |Clin Infect Dis
                                                               MEDLINE
L37 ANSWER 35 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
     2001:100967 HCAPLUS
DN
     134:141721
     N-Substituted glucamine compounds for treating hepatitis virus
     Mueller, Richard A.; Bryant, Martin L.; Partis, Richard A.
ΙN
     G.D. Searle and Co., USA
SO
     PCT Int. Appl., 148 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
    WO 2001008672 A?
                                DATE APPLICATION NO.
                                           -----
                        A2 20010208 WO 2000-US3816 20000214 <--
PΙ
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         CA 2000-2362785
     CA 2362785
                                20010208
                          AA
                                                                  20000214 <--
                                                                 20000214 <--
     EP 1173161
                                20020123
                                         EP 2000-917640
                         A2
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
        TE, SI, LT, LV, FI, RO
                                         JP 2001-513402 20000214 <--
US 2002-322045 20000217
US 6515028 B1 20030204 US 2003505501 T2 20030212 J US 2003195229 A1 20031016 US 6747149 B2 20040608 PRAI US 1999-119836P P 19990212 <--- US 1999-119858P P 19990212 <---
```

US 2000-503865 A1 20000214 <--WO 2000-US3816 W 20000214 <--

OS MARPAT 134:141721

AB N-Substituted glucamine compds. (Markush included) are effective in treatment of hepatitis infections, including hepatitis

B and hepatitis C. In treating hepatitis infections, the compds. of the invention may be used alone or in combination with another antiviral agent selected from nucleosides, nucleotides, immunomodulators, immunostimulants, or various combinations of such other agents. Preparation of e.g. 1,5-(butylimino)-1,5-dideoxy-D-glucitol tetraacetate is described.

IT 3056-17-5, Stavudine 7481-89-2, Dideoxycytidine 147058-39-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)

(N-substituted glucamine compds. for treating **hepatitis** virus infections, and use with other agents)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 147058-39-7 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L37 ANSWER 36 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:90894 HCAPLUS

DN 135:313173

TI Increased mitochondrial toxicity with ribavirin in HIV/HCV coinfection

AU Lafeuillade, A.; Hittinger, G.; Chadapaud, S.

CS Department of Infectious Diseases, Hospital Chalucet, Toulon, 83056, Fr.

SO Lancet (2001), 357(9252), 280-281 CODEN: LANCAO; ISSN: 0140-6736

PB Lancet Ltd.

DT Journal

LA English

AB In two of 15 patients coinfected with HIV and hepatitis C virus who received interferon- α plus ribavirin in addition to HAART, we observed multiorgan dysfunction and lactic acidemia. As ribavirin is a nucleoside analog, an increased risk of mitochondrial toxicity can be induced in HIV-infected patients already treated with nucleoside analogs, leading to clin. deterioration in some cases.

IT **3056-17-5**, Stavudine

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(increased mitochondrial toxicity with ribavirin in HIV/HCV coinfection)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RETABLE

Referenced Author (RAU)	(RPY) (RVL) (F	, , , , ,	File
=======================================	=+====+==	====+============	======+========
Brinkman, K	1999 354 11	12 Lancet	HCAPLUS
Carr, A	2000 14 F2	5 AIDS	HCAPLUS
Kochhar, D	1980 52 99	Toxicol Appl	Pharmac HCAPLUS
McKenzie, R	1995 333 10		

Weiss, R |1993 |16 1301 | J Vet Pharmacol Ther | HCAPLUS

- L37 ANSWER 37 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN 2001:60217 HCAPLUS AN 135:116588 DN TΤ Hepatitis B and C virus co-infection and the risk for hepatotoxicity of highly active antiretroviral therapy in HIV-1 infection ΑU den Brinker, Marieke; Wit, Ferdinand W. N. M.; Wertheim-van Dillen, Pauline M. E.; Jurriaans, Suzanne; Weel, Jan; van Leeuwen, Remko; Pakker, Nadine G.; Reiss, Peter; Danner, Sven A.; Weverling, Gerrit Jan; Lange, Joep M. A. CS Department of Internal Medicine, National AIDS Therapy Evaluation Center (NATEC), Amsterdam, 1105 AZ, Neth. SO AIDS (London) (2000), 14(18), 2895-2898 CODEN: AIDSET; ISSN: 0269-9370 PB Lippincott Williams & Wilkins DT Journal LA English AB The objective was to investigate the risk of hepatotoxicity after initiation of protease inhibitor-containing highly active antiretroviral therapy (HAART) for HIV-1 infected patients with chronic hepatitis B virus (HBV) or hepatitis C virus (HCV) co-infection. Design: Retrospective study with 394 HIV-1-infected patients initiating HAART at a single university clinic. Methods: Liver enzyme elevation (LEE) was defined as alanine aminotransferase or aspartate aminotransferase at least five times the upper limit of normal and an absolute increase of > 100 U/l. Relative risks for time to LEE were estimated using Cox proportional hazards models. Results: Of 394 patients 7% were hepatitis B surface antigen (HBsAg)-pos. and 14% were anti-HCV-pos. Patients with chronic hepatitis had a higher risk for LEE compared with patients without co-infection: 37% vs. 12% resp. After adjustment for higher baseline transaminases, the presence of HBsAg or anti-HCV remained associated with an increased risk of LEE - relative risk 2.78 (95% confidence interval, 1.50-5.16) and 2.46 (95% confidence interval, 1.43-4.24) resp. In patients with LEE, transaminases declined whether HAART was continued or modified. Of patients with chronic HBV infection 38% lost HBeAg or developed anti-HBe after initiation of HAART, and one seroconverted from HBsAg-pos. to anti-HBs-pos. However, there was no clear relationship with LEE. Conclusions: HIV-1-infected patients co-infected with HBV or HCV were at considerably higher risk of developing LEE when HAART was initiated compared with patients without co-infection, but it is usually not necessary to modify antiretroviral therapy. IT 3056-17-5, Stavudine RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or
- effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hepatitis B and C virus co-infection and risk for hepatotoxicity of highly active antiretroviral therapy in HIV-1 infected human patients)
- 3056-17-5 HCAPLUS RN
- Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (-).

L37 ANSWER 38 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:867640 HCAPLUS

DN 135:40476

TI The hepatitis C virus NS5B RNA-

dependent RNA polymerase activity and
susceptibility to inhibitors is modulated by metal cations

AU Alaoui-Ismaili, Moulay Hicham; Hamel, Martine; L'Heureux, Lucille; Nicolas, Olivier; Bilimoria, Darius; Labonte, Patrick; Mounir, Samir; Rando, Robert F.

CS BioChem Pharma Inc., Laval, QC, H7V 4A7, Can.

SO Journal of Human Virology (2000), 3(6), 306-316 CODEN: JHVIFC; ISSN: 1090-9508

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB Objectives: The aim of this study was to understand the effect of metal cations on the hepatitis C virus (

HCV) NS5B in vitro RNA-dependent RNA

polymerase (RdRp) activity and its susceptibility to various inhibitors. Methods: A recombinant full-length HCV NS5B protein was expressed in insect cells and purified to homogeneity. RdRp activity was assessed using standard filtration or polyacrylamide gel-based assays. Results: Efficient inhibition of the HCV NS5B RdRp activity by gliotoxin, as well as by various substrate analogs, occurs in the presence of Mn2+, but not of Mg2+. Assays performed in the presence of both cofactors suggest that, in vitro, the enzyme's affinity for Mn2+ is higher than that for Mg2+. In addition, the RdRp activity, displayed in the presence of heteropolymeric templates, is significantly increased when the metal cofactor consists of Mn2+. Finally, steady state kinetics showed that the velocity of the reaction, as well as the affinity of the enzyme for its substrate, could both be affected by the nature of the divalent metal cation used.

IT 9026-28-2, RNA-dependent RNA polymerase

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(NS5B; hepatitis C virus NS5B RNA

-dependent RNA polymerase activity and

susceptibility to inhibitors is modulated by metal cations in vitro)

RN 9026-28-2 HCAPLUS

CN Nucleotidyltransferase, ribonucleate, RNA-dependent (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 66004-77-1, 2'-3' Dideoxycytidine triphosphate RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(hepatitis C virus NS5B RNA-

dependent RNA polymerase activity and

susceptibility to inhibitors is modulated by metal cations in vitro)

RN 66004-77-1 HCAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

P	דיי	מ ח	R	Τ.	F

Referenced Author (RAU)	Year (RPY) =+=====	(RVL)	(RPG)	(RWK)	Referenced File
Al, R	11998		1141	Virus Res	HCAPLUS
Beese, L	11991	110	125	EMBO J	HCAPLUS
Behrens, S	1996	15	112	EMBO J	HCAPLUS
Bressanelli, S	1999	196	13034	Proc Natl Acad Sci	HCAPLUS
Choo, Q	1989	1244	359	Science	HCAPLUS
Clarke, B	1997	178	12397	J Gen Virol	HCAPLUS
Ferrari, E	11999	73	1649	J Virol	HCAPLUS
Harlow, E	11998		1	Antibodies: a labora	1
Hideo, A	11999		1417	Structure	1
Ishii, K	1999	29	1227	Hepatology	HCAPLUS
Johnson, R		377	129	Arch Biochem Biophys	HCAPLUS
Joyce, M	1997	94	1619	Proc Natl Acad Sci	
Koonin, E		•	2197	J Gen Virol	
Lesburg, C				Nat Struct Biol	1
Lohmann, V	1997	71	8416	J Virol	HCAPLUS
Lohmann, V	1998	•	108	Virology	HCAPLUS
Luo, G	12000		1851	J Virol	HCAPLUS
Miller, P	1969		431	Science	1
Murphy, F	1995			Sixth report of the	1
Oh, J	1999		17694	•	HCAPLUS
O'Reilly, E	1998		287		HCAPLUS
Rodriguez, P	1992		1971	J Virol	HCAPLUS
Saito, I	•		6547	Proc Natl Acad Sci	HCAPLUS
Steitz, T	1998		231	Nature	HCAPLUS
Sun, X	12000		798	Biochem Biophys Res	HCAPLUS
Tabor, S	1989		4076	Proc Natl Acad Sci	HCAPLUS
Tomei, L	12000		1759	J Gen Virol	HCAPLUS
Tomei, L			4017	•	HCAPLUS
Trown, P	1972		261	Antimicrob Agents Ch	
Yamashita, T	1998				HCAPLUS
Yuan, Z		232	231	Biochem Biophys Res	HCAPLUS
Zhong, W	12000	74	2017	J Virol	HCAPLUS

L37 ANSWER 39 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:840382 HCAPLUS

DN 135:40464

TI Safety and efficacy of interferon-ribavirin combination therapy in HCV-HIV coinfected subjects: An early report

- AU Zylberberg, H.; Benhamou, Y.; Lagneaux, J. L.; Landau, A.; Chaix, M. -L.; Fontaine, H.; Bochet, M.; Poynard, T.; Katlama, C.; Pialoux, G.; Brechot, C.; Pol, S.
- CS Unite d'Hepatologie, INSERM U370, Unite d'Hepatologie, INSERM U370, CHU Necker, Paris, Fr.
- SO Gut (2000), 47(5), 694-697 CODEN: GUTTAK; ISSN: 0017-5749
- PB BMJ Publishing Group
- DT Journal
- LA English
- AB More severe liver disease together with a poor response rate to α interferon argue for the use of more potent anti-hepatitis

 C virus (HCV) therapies in human

 immunodeficiency virus (HTV)-HCV coinfected patients, but the

immunodeficiency virus (HIV)-HCV coinfected patients, but the efficacy and safety of interferon-ribavirin combination therapy in HIV infected subjects are unknown. Aim of this study was to retrospectively evaluate the efficacy and safety of anti-HCV combination therapy in 21 HCV-HIV coinfected patients receiving antiretroviral therapy, and to access the clin. relevance of in vitro inhibition of phosphorylation by ribavirin of potent inhibitors of HIV-i.e., zidovudine, stavudine, and zalcitabine. Twenty one patients were treated with combined antiretroviral therapy including zidovudine (n=8) or stavudine (n=13) (in association with protease inhibitors in 12). All received ribavirin (1000 or 1200 mg/day) and α interferon (3 MU three times/wk) for chronic hepatitis C infection. All patients had not responded (n=20) or relapsed (n=1) after a previous six month course of α interferon therapy. HIV viral load (Monitor test) and CD4 cells count were measured at the beginning and every three months during and after ribavirin plus α interferon therapy over a mean period of 11 (1) months. Clin. and biol. adverse effects were recorded. There was no significant variation in HIV viral load or CD4 cell counts after three or six months of ribavirin therapy compared with baseline values. Of the 21 subjects, three (14%) had an increase in HIV viral load of more than 0.5 log leading to discontinuation of ribavirin in one. Eleven of 21 (52.4%) and initial neg. HCV viremia at three (n=10) or six (n=1) months but only six were polymerase chain reaction neg. at the end of therapy, leading to rates for primary response and breakthrough of 23.8% and 28.5%, resp. Six months after completion of therapy, three patients relapsed (14.3%) and three (14.3%) had sustained virol. response. Median Hb concentration decreased significantly after three

and

six months of ribavirin therapy (p=0.0002 and p=0.0003, resp.) leading to withdrawal of therapy in one patient. These preliminary results show that: (1) despite in vitro interactions between ribavirin, zidovudine, and stavudine, significant variation in HIV replication does not usually occur in HCV-HIV coinfected patients receiving ribavirin and different antiretroviral regimens, including zidovudine and stavudine; (2) α interferon and ribavirin combination therapy induced primary and sustained virol. responses in 28.5% and 14.3% of treated subjects (who were previous non-responders to interferon therapy), resp.; (3) anemia is a frequent adverse event. Such results should be confirmed in larger prospective trials.

IT 3056-17-5, Stavudine 7481-89-2, Zalcitabine
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
 (interferon-α and ribavirin combination therapy in humans coinfected with hepatitis C virus and HIV)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RETABLE

Referenced Auth	hor Year VOL	PG	Referenced Work	Referenced
(RAU)	(RPY) (RVL) (RPG)	(RWK)	! File
	=====+====	=+=====	++===================================	===+=======
Baba, M	1987 31	11613	Antimicrob Agents	Ch HCAPLUS
Darby, S	1997 350	11425	Lancet	MEDLINE
Davis, G	1998 339	1493	N Engl J Med	HCAPLUS
Hoggard, P	1997 41	1231	Antimicrob Agents	Ch HCAPLUS
Mc Hutchinson, J	1998 339	1485	N Engl J Med	1
Pol, S	1998 28	1945	J Hepatol	HCAPLUS
Pol, S	1999 31	1	J Hepatol	HCAPLUS
Poynard, T	1998 352	11426	Lancet	HCAPLUS
Reichard, O	1998 351	183	Lancet	HCAPLUS
Roberts, R	1990 4	167	AIDS	MEDLINE
Spanish Ribavirin	Trial 1991 338	16	Lancet	1
Vogt, M		11376	Science	HCAPLUS
Zylberberg, H	1996 23	11117	Clin Infect Dis	MEDLINE

L37 ANSWER 40 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:672955 HCAPLUS

DN 134:187861

TI Lack of interference between ribavirin and nucleosidic analogues in HIV/ HCV co-infected individuals undergoing concomitant antiretroviral and anti-HCV combination therapy

AU Landau, Alain; Batisse, Dominique; Piketty, Christophe; Jian, Raymond; Kazatchkine, Michel D.

CS Service d'Hepatologie et de Gastro-Enterologie and Service d'Immunologie Clinique, Hopital Europeen Georges Pompidou, Universite Pierre et Marie Curie, Paris, Fr.

SO AIDS (London) (2000), 14(12), 1857-1858 CODEN: AIDSET; ISSN: 0269-9370 PB Lippincott Williams & Wilkins

DT Journal

LA English

AB Changes in plasma HIV-RNA levels were examined during and after combination therapy with interferon- α (IFN) and ribavirin in 38 HIV/

hepatitis C virus (HCV) coinfected

patients. Nineteen of these patients had been treated with a combination of 2 nucleosidic analogs, stavudine and lamivudine or zidovudine and lamivudine for a mean duration of 20+/-10 mo before the initiation of IFN and ribavirin. The remaining 19 patients had been treated with a triple combination antiretroviral regimen including a protease inhibitor with stavudine and lamivudine for 24 +/-8 mo.. The mean plasma HIV-RNA levels did not differ between baseline (preadministration), at discontinuation of drug administration, and at 6 mo postadministration of IFN and ribavirin. The absolute number of CD4 cells decreased significantly during IFN treatment

and

returned to baseline values thereafter, suggesting that CD4 cells are trapped in extravascular sites during therapy with IFN. These results strongly argue against the in vivo relevance of the in vitro competition between ribavirin, stavudine, and zidovudine for intracellular phosphorylation. Ribavirin may thus be initiated in HIV/HCV coinfected patients receiving zidovudine or stavudine without switching reverse transcriptase inhibitors.

IT 3056-17-5, Stavudine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(lack of interference between ribavirin and nucleosidic analogs in HIV/ HCV co-infected individuals undergoing concomitant antiretroviral and anti-HCV combination therapy)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RETABLE

Referenced Author (RAU)	(RPY) (RVL) (RPG)	• •	Referenced File
Benhamou, Y Darby, S Ernstoff, M Hoggard, P Landau, A Poynard, T Soriano, V Zylberberg, H	1999 30	Hepatology Lancet Am J Med Antimicrob Agents AIDS Lancet AIDS	MEDLINE MEDLINE MEDLINE

L37 ANSWER 41 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

```
ΑN
     2000:573657 HCAPLUS
DN
     133:172150
TΙ
     Use of substituted-1,5-dideoxy-1,5-imino-D-glucitol compounds for treating
     hepatitis virus infections
ΙN
     Mueller, Richard A.; Bryant, Martin L.; Partis, Richard A.
PΑ
     G.D. Searle and Co., USA
SO
     PCT Int. Appl., 170 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                  DATE
     -----
                         ____
                                -----
                                            -----
PΙ
     WO 2000047198
                         A2
                                20000817
                                            WO 2000-US3768
                                                                   20000214 <--
     WO 2000047198
                         А3
                                20010215
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2362914
                          AA
                                20000817
                                         CA 2000-2362914
                                                                   20000214 <--
                                          EP 2000-914585
     EP 1165080
                          Α2
                                20020102
                                                                   20000214 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002536407
                         T2
                                20021029
                                            JP 2000-598151
                                                                   20000214 <--
     US 6545021
                          B1
                                20030408
                                            US 2000-503945
                                                                   20000214 <--
     EP 1658846
                                            EP 2005-27240
                          A1
                                20060524
                                                                   20000214 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
                                20031127
     US 2003220299
                         Al
                                            US 2003-341717
                                                                   20030114 <--
PRAI US 1999-119722P
                         Ρ
                                19990212
                                          <--
     US 1999-119856P
                         Ρ
                                19990212
                                          <--
     EP 2000-914585
                                20000214
                                          <--
                         A3
     US 2000-503945
                         A1
                                20000214
                                          <--
     WO 2000-US3768
                         W
                                20000214
                                          <--
OS
    MARPAT 133:172150
AΒ
     N-Substituted-1,5-dideoxy-1,5-imino-D-glucitol compds. are effective in
     treatment of hepatitis infections, including hepatitis
     B and hepatitis C. In treating hepatitis
     infections, the tittle compds. may be used alone, or in combination with
     another antiviral agent selected from among nucleosides, nucleotides,
     immunomodulators, immunostimulants or various combinations of such other
     agents.
IT
     3056-17-5, Stavudine 7481-89-2, Dideoxycytidine
     147058-39-7
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (use of substituted dideoxyimino-D-glucitol compds. for treating
       hepatitis virus infections and combination with other antiviral
        agents or immunostimulants)
     3056-17-5 HCAPLUS
RN
     Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
CN
```

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 147058-39-7 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L37 ANSWER 42 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:443717 HCAPLUS

DN 133:37763

TI Can HCV affect the efficacy of anti-HIV treatment?

AU Filippini, P.; Coppola, N.; Scolastico, C.; Liorre, G.; Nocera, R.; Sagnelli, E.; Piccinino, F.

CS Institute of Infectious Diseases, School of Medicine, Second University of Naples, Naples, Italy

SO Archives of Virology (2000), 145(5), 937-944 CODEN: ARVIDF; ISSN: 0304-8608

PB Springer-Verlag Wien

DT Journal

LA English

AB To evaluate the impact of new antiretroviral combinations (HAART: Highly Active Anti Retroviral Therapy) on HCV replication and liver enzyme levels, we analyzed the changes in HCV viremia and

aminotransferase levels in HIV and HCV co-infected patients. Moreover, to evaluate the influence of HCV infection on the efficacy of HAART, we compared the virol., immunol. and biochem. response to antiretroviral combinations in anti-HIV pos. subjects with or without HCV infection. We enrolled eight consecutive outpatients with HIV-HCV coinfection and with indications for HAART (Group A). For each patient in group A, we selected an anti-HIV neg. patient with indications for HAART, pair-matched for age, sex, risk factor for HIV infection, presumed duration of infection, number of CD4 cells, HIV viremia and treatment schedule (Group B). A statistically significant increase in CD4 in both groups was found at 1st, 3rd and 6th month of antiretroviral therapy. A decrease in HIV-RNA in both groups was observed at 1st and 6th month of treatment. The percentage of patients with undetectable HIV-RNA at the 1st month was higher in Group B than in Group A (8/8 vs. 3/8, p = 0.025). Basal HCV-RNA viremia was very high in each case and no variations during treatment were observed During therapy the aminotransferase levels slightly decreased in Group A and consistently increased in Group B. In Group A the differences were not significant to the statistical anal.; in Group B the aminotransferase levels at 3rd and 6th month were significantly higher than those observed at the baseline. 3056-17-5, Stavudine 7481-89-2, Zalcitabine

3056-17-5, Stavudine 7481-89-2, Zalcitabine
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(can HCV affect efficacy of anti-HIV treatment)

RN 3056-17-5 HCAPLUS

ΙT

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RETABLE

Referenced Author	Year	VOL PG	Referenced Wor	k Referenced
(RAU)	(RPY)	(RVL) (RPG)	(RWK)	File
=======================================	=+====+=	+	+==========	+
BHIVA	1997 :	349 1086	Lancet	1

```
Battegay, M
                     |1996 |24
                                 |961
                                       |Hepatology
                                                            MEDLINE
                                        Lancet
                                1924
Brau, N
                     |1997 |349
                                                            MEDLINE
Carpenter, C
                    |1997 |277
                                |1962 |JAMA
                                                            MEDLINE
Chamot, E
                    |1992 |6
                                 1430
                                        IAIDS
                                                            IMEDLINE
Collier, A
                    |1996 |334
                                11011
                                       |N Engl J Med
                                                            IHCAPLUS
Cribier, B
                    |1995 |9
                                 11131
                                        AIDS
                                                            | HCAPLUS
Eyster, M
Eyster, M
                                       Blood
                    |1994 |84
                                 11020
                                                            IMEDLINE
                                        | J Acquir Immune Defi| MEDLINE
                    |1993 |6
                                 1602
Francisci, D
                  |1995 |11
                                 |123
                                        |Eur J Epidemiol
                                                            IMEDLINE
Hammer, S
                    |1997 |333 |725
                                        |N Engl J Med
John, M
                    |1998 |12
                                 12289
                                        |AIDS
                                                            | HCAPLUS
                   |1995 |333
Markowitz, M
                                       |N Engl J Med
                                |1534
                                                            | HCAPLUS
Matzuda, J
                    |1997 |350
                                1364
                                        Lancet
Pantaleo, G
                    |1996 |50
                                 1825
                                        |Ann Rev Microbiol
                                                            | HCAPLUS
Picard, O
                    |1998 |129
                                1670
                                        |Ann Intern Med
                                                            MEDLINE
Rosado, R
                    |1998 |28
                                 |434A |Hepatology Supply
                    |1998 |177
Rutschmann, O
                                |783
                                        |J Infect Dis
                                                            | HCAPLUS
Sabin, A
                    |1997 |175
                                1164
                                        | J Infect Dis
Sherman, K
                    |1993 |31
                                 12679
                                       | J Clin Microbiol
                                                            MEDLINE
                                 11
Soto, B
                     |1997 |26
                                        | J Hepatol
                                                            IMEDLINE
Spengler, U
                     |1998 |29
                                 |1023
                                       |J Hepatol
                                                            MEDLINE
Thomas, D
                     |1996 |174
                                | 690
                                        |J Infect Dis
                                                            MEDLINE
Wrigh, T
                     |1994 |20
                                 |1152
                                        |Hepatology
Zylberberg, H
                     |1998 | 26
                                 11104
                                       |Clin Infect Dis
                                                            IMEDLINE
    ANSWER 43 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
ΑN
    2000:401851 HCAPLUS
DN
    133:53685
TΙ
    Protein transduction system and methods of use thereof
    Dowdy, Steven F.
    Washington University, USA
    PCT Int. Appl., 127 pp.
    CODEN: PIXXD2
DT
    Patent
    English
FAN.CNT 1
                                        APPLICATION NO.
    PATENT NO.
                       KIND
                              DATE
                                                              DATE
    -----
                       ____
                             -----
                                         ______
    WO 2000034308
PΙ
                       A2
                              20000615
                                       WO 1999-US29289
                                                              19991210 <--
    WO 2000034308
                       A3
                              20001019
           AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
            RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    CA 2354044
                        AA
                              20000615
                                       CA 1999-2354044
                                                               19991210 <--
    AU 2000021728
                              20000626
                        Α1
                                         AU 2000-21728
                                                              19991210 <--
                              20011004 EP 1999-966101
    EP 1137664
                        A2
                                                              19991210 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    JP 2002531113
                              20020924
                                       JP 2000-586751
                        T2
                                                              19991210 <--
PRAI US 1998-111701P
                        Ρ
                              19981210
                                       <--
    WO 1999-US29289
                       W
                             19991210
                                      <--
OS
    MARPAT 133:53685
AΒ
    The present invention provides a protein transduction system comprising
```

one or more fusion proteins that includes a transduction domain and a

cytotoxic domain. The cytotoxic domain is specifically activated in a cell exhibiting a unique characteristic. Further provided are protein transduction domains that provide enhanced transduction efficiency. The protein transduction system effectively kills or injures cells infected by one or a combination of different pathogens or cells exhibiting unique characteristics such as high levels of heavy metals, DNA damage or uncontrolled cell division.

IT 3056-17-5, d4t 7481-89-2, Ddc

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(protein transduction system and methods of use thereof)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L37 ANSWER 44 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:98300 HCAPLUS

DN 132:132356

TI Chemically induced intracellular hyperthermia for therapeutic and diagnostic use

IN Bachynsky, Nicholas; Roy, Woodie

PA Texas Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 149 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, .UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2337690 AA20000210 CA 1999-2337690 19990727 <--AU 9951318 A1 20000221 AU 1999-51318 19990727 <--AU 750313 В2 20020718 EP 1098641 20010516 EP 1999-935949 19990727 <--Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO PRAI US 1998-94286P Ρ 19980727 WO 1999-US16940 W 19990727 <--

AB Therapeutic pharmacol. agents and methods are disclosed for chemical induction of intracellular hyperthermia and/or free radicals for the diagnosis and treatment of infections, malignancy, and other medical conditions. A process and composition are provided for the diagnosis or killing of cancer cells and inactivation of susceptible bacterial, parasitic, fungal, and viral pathogens by chemical generating heat, and/or free radicals and/or hyperthermia-inducible immunogenic determinants by using mitochondrial uncoupling agents, especially 2,4-dinitrophenol, and their conjugates, either alone or in combination with other drugs, hormones,

IT 3056-17-5 7481-89-2

cytokines and radiation.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chemical induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 7481-89-2 HCAPLUS CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

```
RETABLE
```

```
Referenced Author | Year | VOL | PG | Referenced Work | Referenced
 (RAU) | (RPY)|(RVL)|(RPG) | (RWK) | File
Gordon
                                 | HCAPLUS
            11997 |
Gordon
                      |US 5622686 A
                                  - 1
Rubin
            |1991 |
                      |US 5005588 A
```

- L37 ANSWER 45 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
- 1999:566061 HCAPLUS
- 131:170587 DN
- ΤI Preparation of 2'-fluoro nucleosides as antiviral agents
- ΙN Schinazi, Raymond F.; Liotta, Dennis C.; Chu, Chung K.; Mcatee, J. Jeffrey; Shi, Junxing; Choi, Yongseok; Lee, Kyeong; Hong, Joon H.
- PΑ Emory University, USA; The University of Georgia Research Foundation, Inc.
- SO PCT Int. Appl., 109 pp.
- CODEN: PIXXD2
- DTPatent
- LA English
- FAN.CNT 1

GI

EMN.	PATENT NO.			KIND DATE			APPLICATION NO.				DATE								
PI		W:	AL, ES, LT, SE, GH, ES,	AM, FI, LU, SG, GM, FI,	AT, GB, LV, SI, KE, FR,	AU, GE, MD, SK, LS, GB,	AZ, HU, MG, TJ, MW, GR,	1999 BB, IL, MK, TM, SD, IE,	BG, IS, MN, TR, SL, IT,	BR, JP, MW, TT, SZ, LU,	BY, KE, MX, UA, UG, MC,	CA, KG, NO, UG, ZW, NL,	CH, KP, NZ, US, AT, PT,	CN, KR, PL, UZ, BE,	CZ, KZ, PT, VN CH,	DE, LK, RO,	DK, LR, RU,	EE, LS, SD,	
	EP 1	99278 L0586 R:	008 371 686	BE,	CH,	AA A1 A1	·	ML, 1999 1999 2000 ES,	0902 0915 1213		CA 1 AU 1 EP 1	999-: 999-: 999-:	2322 2787 9084	1 37		1:	9990: 9990:	225 225	<
	JP (2) US (6) BR 9 US 2	002 348 908 2002	50455 587 770 1981	58		A A1		2002 2002 2004 2002	0219 0629 1226		US 1 BR 1	000-: 999-: 999-:	2571 8270	30		1:	9990: 9990: 9990: 0020:	225 225	<
PRAI	US 6 AU 2 US 2 US 1 US 1 US 1	20032 20042 1998- 1998-	24450 25414 -7589 -8050 -2571	41 93P 69P 130		B2 A1 A1 P P A1 W		2005 2003 2004 1998 1999 1999	1002 1216 0225 0403 0225	<- <-	US 2 - - -	003-: 004-							
os	US 2 MARP	2002-	-6112	28	87	A1		2002											

AΒ 2'-Fluoro nucleoside compds. I wherein R1 is OH, H, OR3, N3, CN, halogen, including F, or CF3, lower alkyl, amino, lower alkylamino, or alkoxy, and base refers to a purine or pyrimidine base; R2 is H, phosphate, including monophosphate, diphosphate, triphosphate, or a stabilized phosphate prodrug; acyl, or other pharmaceutically acceptable leaving group which when administered in vivo , is capable of providing a compound wherein R2 is H or phosphate; sulfonate ester including alkyl or arylalkyl sulfonyl including methanesulfonyl, benzyl, wherein the Ph group is optionally substituted with one or more substituents as described in the definition of aryl given above, a lipid, an amino acid, peptide, or cholesterol; and R3 is acyl, alkyl, phosphate, or other pharmaceutically acceptable leaving group which when administered in vivo , is capable of being cleaved to the parent compound, or a pharmaceutically acceptable salt thereof, are disclosed which are useful in the treatment of hepatitis B infection, hepatitis C infection, HIV and abnormal cellular proliferation, including tumors and cancer. $1-(2,3-dideoxy-2-fluoro-\beta-L-glycero-pent-2-eno-furanosyl)$ thymine was prepared and tested for its antiviral activity (EC50 > 100 μ M).

IT 221156-34-9P 222974-41-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of fluoro nucleosides as antiviral agents and proliferation inhibitors)

RN 221156-34-9 HCAPLUS

CN Triphosphoric acid, P-[[(1R,4S)-4-(4-amino-5-fluoro-2-oxo-1(2H)-pyrimidinyl)-2-cyclopenten-1-yl]methyl] ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 222974-41-6 HCAPLUS

CN Triphosphoric acid, P-[[(1R,4S)-4-(4-amino-2-oxo-1(2H)-pyrimidinyl)-2-cyclopenten-1-yl]methyl] ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 221156-33-8P 221156-52-1P 221156-53-2P

221156-54-3P 238747-51-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of fluoro nucleosides as antiviral agents and proliferation inhibitors)

RN 221156-33-8 HCAPLUS

CN 2(1H)-Pyrimidinone, 1-[(2R,4S)-4-[(acetyloxy)methyl]-2-cyclopenten-1-yl]-4-amino-5-fluoro-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 221156-52-1 HCAPLUS

CN Acetamide, N-[1-[(2R,4S)-4-[(acetyloxy)methyl]-2-cyclopenten-1-yl]-5-fluoro-1,2-dihydro-2-oxo-4-pyrimidinyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 221156-53-2 HCAPLUS

CN Acetamide, N-[1-[(2R,4S)-4-[(acetyloxy)methyl]-2-cyclopenten-1-yl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 221156-54-3 HCAPLUS

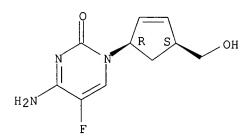
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2R,4S)-4-(hydroxymethyl)-2-cyclopenten-1-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 238747-51-8 HCAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(1R,4S)-4-(hydroxymethyl)-2-cyclopenten-1-yl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RETABLE

Referenced Author (RAU)	(RPY) (RVL)	(RPG)	,	Referenced File
Claude, P Haru, M	1996	 	US 5512671 A IEP 0839813 A	HCAPLUS HCAPLUS
Haru, M	1997		WO 9737993 A	HCAPLUS
Siddiqui, M Sterzycki, R	1998 39 1990 33	1657 2150	TETRAHEDRON LETTERS JOURNAL OF MEDICINAL	HCAPLUS HCAPLUS
Univ Emory Univ Emory	1996 1996	 	WO 9622778 A WO 9640164 A	HCAPLUS HCAPLUS

L37 ANSWER 46 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:312073 HCAPLUS

DN 130:346921

 ${\tt TI}$ Ritonavir and saquinavir combination therapy for the treatment of HIV infection

AU Cameron, D. William; Japour, Anthony J.; Xu, Yi; Hsu, Ann; Mellors, John;

Farthing, Charles; Cohen, Calvin; Poretz, Donald; Markowitz, Martin; Follansbee, Steve; Angel, Jonathan B.; McMahon, Deborah; Ho, David; Devanarayan, Viswanath; Rode, Richard; Salgo, Miklos P.; Kempf, Dale J.; Granneman, Richard; Leonard, John M.; Sun, Eugene

- CS Ottawa General Hospital, Ottawa, ON, K1H 8L6, Can.
- SO AIDS (London) (1999), 13(2), 213-224 CODEN: AIDSET; ISSN: 0269-9370
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- AΒ The safety and antiretroviral activity of ritonavir (NorvirTM) and saquinavir (InviraseTM) combination therapy were evaluated in patients with HIV infection. A group of 141 adults with HIV infection, CD4 T lymphocyte counts of 100-500 + 106 cells/1, whether treated previously or not with reverse transcriptase inhibitor therapy, but without previous HIV protease inhibitor drug therapy. After discontinuation of prior therapy for 2 wk, group I patients were randomized to receive either combination (A) ritonavir 400 mg and saquinavir 400 mg twice daily or (B) ritonavir 600 mg and saquinavir 400 mg twice daily. After an initial safety assessment of group I patients, group II patients were randomized to receive either (C) ritonavir 400 mg and saquinavir 400 mg three times daily or (D) ritonavir 600 mg and saquinavir 600 mg twice daily. Investigators were allowed to add up to two reverse transcriptase inhibitors (including at least one with which the patient had not been previously treated) to a patient's regimen after week 12 for failure to achieve or maintain an HIV RNA level ≤ 200 copies/mL documented on two consecutive occasions. Plasma HIV RNA levels and CD4+ T-lymphocyte counts were measured at baseline, every 2 wk for 2 mo, and monthly thereafter. Safety was assessed through the reporting of adverse events, phys. examns., and the monitoring of routine laboratory tests. The 48 wk of study treatment was completed by 75% (106/141) of the patients. Over 80% of the patients on treatment at week 48 had an HIV RNA level ≤ 200 copies/mL. In addition, intent-to-treat and on-treatment analyses revealed comparable results. Suppression of plasma HIV RNA levels was similar for all treatment arms (mean areas under the curve minus baseline through 48 wk were -1.9, -2.0, -1.6, -1.8 log10 copies/mL in ritonavir-saquinavir 400-400 mg twice daily, 600-400 mg twice daily, 400-400 mg three times daily, and 600-600 mg twice daily, resp.). Median CD4 T-lymphocyte count rose by 128 + 106 cells/l from baseline, with an interquartile range (IQR) of 82-221 + 106 cells/1. The most common adverse events were diarrhea, circumoral paresthesia, asthenia, and nausea. Reversible elevation of serum transaminases (> 5 + upper limit of normal) occurred in 10% (14/141) of the patients enrolled in this study and was associated with baseline abnormalities in liver function tests, baseline hepatitis B surface antigen positivity, or hepatitis C antibody positivity (relative risk, 5.0; 95% confidence interval 1.5-16.9). Most moderate or severe elevations in liver function tests occurred in patients treated with ritonavir-saquinavir 600-600 mg twice daily. Ritonavir 400 mg combined with saquinavir 400 mg twice daily with the selective addition of reverse transcriptase inhibitors was the best-tolerated regimen of four dose-ranging regimens and was equally as active as the higher dose combinations in HIV-pos. patients without previous protease inhibitor treatment.
- IT **3056-17-5**, Stavudine

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(antiviral activity of ritonavir and saquinavir combination therapy for

the treatment of human HIV infection with)

RN

3056-17-5 HCAPLUS Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry. Rotation (-).

RETABLE

(RAU)		(RVL)	(RPG)	(RWK)	Referenced File
				+======================================	•
Buss, N	1998			5th Conference on Re	
Cameron, D	1998	-	1543	Lancet	HCAPLUS
Carr, A			1996	Lancet	
Collier, A			11011	. 3	HCAPLUS
Deeks, S	1997	•	145	JAMA	HCAPLUS
Gulick, R	11997		1734		HCAPLUS
Hammer, S	11996		11081		HCAPLUS
Hammer, S	11997		1725		HCAPLUS
Hsu, A	1998		1453	Clin Pharmacol Ther	
Jacobsen, H			S169	AIDS Res Hum Retrovi	•
Kempf, D	11998		F9	AIDS	HCAPLUS
Kempf, D	11997		654	Antimicrob Agents Ch	
Kempf, D	11995			Proc Natl Acad Sci U	
Kohl, N	11988		4686	Proc Natl Acad Sci U	
Lalezari, J	11996	•	1	XI International Con	
Marsh, K	1997		307		HCAPLUS
Merry, C	11997	-	F29	AIDS	HCAPLUS
Molla, A	1998	•	1	Antiviral Res	HCAPLUS
Molla, A	1996	12	1760	Nat Med	HCAPLUS
Mulder, J	1994		292	J Clin Microbiol	HCAPLUS
National Institute Of	A 1996			Division of AIDS: Di	1
Peng, C	1989	63	2550	J Virol	HCAPLUS
Race, E	11998	351	252	Lancet	MEDLINE
Roberts, N	1990	248	358	Science	HCAPLUS
Roche Laboratories Inc	: 1998	1		Fortovase package in	1
Roche Laboratories Inc	: 1998		1	Invirase package ins	1
Rutschmann, O	1998	177	1783		HCAPLUS
Seelmeier, S			6612	Proc Natl Acad Sci U	HCAPLUS
Shapiro, J	1996		1039	Ann Int Med	1

L37 ANSWER 47 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

1998:484946 HCAPLUS AN

DN 129:121659

ΤI A method of modulating an immune response in an infected mammal by transmucosal administration of modulating agent

IN Michaels, Frank; Block, Timothy

PΑ Thomas Jefferson University, USA

SO PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 1

	PATENT NO. KIND DATE			APPLICATION NO.			DATE										
PI	WO	9829121			A1	-	1998	0709	WO	1998-	US41	16		19	9980	102	<
		W: CA, RW: AT,	•		-		-	-	-			•		•	•	•	
		2276450			AA				CA						9980		
	ΕP	979080			A1				EP								
		R: AT, IE,		CH,	DE,	DK,	ES,	FR,	GB, GI	R, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	JΡ	200150736	50		T2		2001	0605	JP	1998-	5303	72		19	9980:	102	<
		6355248			В1				US	1999-	3348	19		19	9990	617	<
PRAI		1997-3459			P		1997										
	WO	1998-US41	l16		M		1998	0102	<								

Methods and compns. for modulating an immune response in mammals infected with a bacterium, a virus, or a parasite are provided. The methods and compns. are useful in mammals experiencing acute or chronic infections. The methods and compns. may be used in conjunction with known treatments for infection. The method entails the transmucosal administration of a composition comprising and epitope. The epitope of the mol. administered may be an epitope located on an antigen of the infectious agent or and epitope located on a tissue of the mammal. Typically, the tissue-derived epitope becomes reactive with the immune system and produces adverse or undesirable effects after the mammal is infected.

IT 7481-89-2, Ddc

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method of modulating an immune response in an infected mammal by transmucosal administration of epitopes and anti-infectious agents)

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RETABLE

Referenced Author	Year VOL PG		Referenced
(RAU)	(RPY) (RVL) (RE		File
Bolognesi	1995	US 5464933 A	HCAPLUS
Domb	1994	US 5340588 A	HCAPLUS
Hale	1997	US 5607691 A	HCAPLUS
Igari	1996	US 5482706 A	HCAPLUS
Marinaro, M	1995 155 462	21 J Immunol	HCAPLUS
Yamagata	1997	US 5628993 A	HCAPLUS
Zhou, X	1991 75 117	Int J Pharm	HCAPLUS

L37 ANSWER 48 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN AN 1998:41720 HCAPLUS

```
DN 128:110885
```

- TI Succinamic acid and succinimide derivatives having anti-inflammatory, anti-viral, and bronchodilating activity, preparation, compositions, and combinations with reverse transcriptase inhibitors
- IN Hamedi-Sangsari, Farid; Nugier, Fabienne; Vallet, Thierry; Grange, Jacques; Vila, Jorge
- PA Compagnie De Developpement Aguettant S.A., Fr.
- SO U.S., 26 pp., Cont.-in-part of U.S. Ser. No. 528,879. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

FAN.CNT 2																				
		PATENT NO.				KIND		DATE		APPLICATION NO.										
	D.T.																			
	ΡI									US 1996-600525										
					AA	AA 19970320			CA 1996-2231996											
		WO 9710205			A1	19970320			WO 1996-IB942					19960913 <						
			W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
									GE,											
									LV,											
									SI,											
												111,	ıĸ,	11,	UA,	og,	04,	V 14 ,	All,	
			D			-	•	•	RU,			~								
			RW:						UG,							FI,	FR,	GB,	GR,	
				ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI					
					A1	19970401				AU 1996-68350					19960913 <					
				A1		1998	EP 1996-928647					19960913 <								
			8548																	
									ES,			GR	ΤТ	T.T	T.T1	NT.	SF	MC	DΨ	
			14.			C11,	DL,	DI,	шо,	111,	GD,	GIV,	тт,	шт,	шо,	1411,	OE,	IIC,	11,	
IE, FI				m o		2000	0010		TD 1	007	-117	0.7			0000					
		JP 2000511871				12					JP 1997-511797									
		AT 203513				\mathbf{E}		20010815		AT 1996-928647					19960913 <					
	PRAI	US 1995-528879				A2		19950915		<										
		US	1996	-600	525		Α		1996	0213	<	_								
		WO	1996	-IB9	42		W		1996	0913	<	_								
	OS	MARPAT 128:110885																		
	GI																			
	\cup_{\perp}																			

Ι

$$\begin{array}{c|c}
 & R^3 \\
 & N (R^2) COR^1 \\
 & HO & O \\
\end{array}$$

- AB A new family of compds. are provided having anti-inflammatory, anti-viral, and brochodilating activity. The compds are I and II [R1 = (halo-substituted) C1-4 alkyl; R2-R4 = H, (substituted) (branched) C1-8 alkyl, etc.]. Also provided are compns. of these compds., which alone, and in combination with reverse transcriptase inhibitors thereby resulting in an additive or synergistic effect, are useful in inhibiting or suppressing viruses including those exhibiting retroviral replication, or in treating viruses including a retrovirus such as HIV in a human cell population. Methods of using these compns., compds., and salts thereof are also provided. Preparation and anti-HIV activity of e.g. D-acetamido-N-hydroxysuccinamic acid are included.
- IT 3056-17-5, d4T 3416-05-5 7481-89-2, DdC RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)

(succinamic acid and succinimide derivs. with antiinflammatory, antiviral, and bronchodilating activity, preparation, compns., and combinations with reverse transcriptase inhibitors)

RN 3056-17-5 HCAPLUS

CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 3416-05-5 HCAPLUS

CN Thymidine, 3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RETABLE

Referenced Author (RAU)	Year VOL PG (RPY) (RVL) (RP	G) (RWK)	Referenced File
Anon		EP 0206497	HCAPLUS
			,
Anon	1987	WO 8701284	HCAPLUS
Anon	1990	WO 9013291	HCAPLUS
Anon	1993	WO 9321218	HCAPLUS
Anon	1994	WO 9427590	HCAPLUS

```
Anon
                       |1995 |
                                         |WO 9517875
                                                               IHCAPLUS
Anon
                       |1996 |
                                          |International Search|
                                   1
Anon
                       |1983 |
                                          |Merck Index 10, 8741|
Anon
                       |1996 |
                                   1
                                          |PCT/ISA/220 Notifica|
Barre-Sinoussi, F
                       |1983 |220
                                  1868
                                          Science
                                                               IMEDLINE
                      |1985 |107
                                  14305
Blodgett
                                         | J Am Chem Soc
                                                               IHCAPLUS
Blodgett
                      |1985 |107
                                  14305
                                         | J Am Chem Soc
                                                               | HCAPLUS
Bodansky, M
                      |1984 |
                                   |125
                                          |The Practice of Pept|
Bukrinsky, M
                      |1991 |254
                                   1423
                                          Science
                                                               | HCAPLUS
Cdc
                      |1981 |30
                                   1305
                                          | MMWR
Chow
                      |1993 |361
                                  1650
                                          Nature
                                                               | HCAPLUS
                      |1988 |239
Fauci, A
                                  1617
                                          |Science
                                                               IMEDLINE
Fauci, A
                      |1993 |262
                                  |1011
                                         |Science
                                                               HCAPLUS
Fox, C
                      |1991 |164
                                  |1051
                                         |J Infect Dis
                                                               MEDLINE
Hirsch, M
                      |1993 |328
                                  11686
                                         |New Engl J Med
                                                               MEDLINE
                      |1994 |266
                                  1801
                                          Science
                                                               IHCAPLUS
McMillan, R
                      |1992 |13
                                   1323
                                          |TIPS
                                                               | HCAPLUS
Miller
                      |1977 |42
                                   11750
                                         |J Org Chem
                                                               IHCAPLUS
Mitsuya
                      |1989 |
                                          IUS 4861759
                                   ł
                                                               IHCAPLUS
Mitsuya
                      |1993 |
                                          IUS 5254539
                                                               IHCAPLUS
Pauwels, R
                      |1988 |20
                                   1309
                                         | J Virol Methods
                                                               | HCAPLUS
Schnittman, S
                      |1989 |245
                                  1305
                                          Science
                                                               MEDLINE
Vila
                      |1996 |
                                          US 5571839
                                                               | HCAPLUS
                                   1
Voqel
                      |1957 |371
                                   1375
                                          |Text-Book of Practic|
Yarchoan
                      |1989 |321
                                   1726
                                          |New Engl J Med
                                                               | HCAPLUS
Zack, J
                       |1990 |61
                                   1213
                                          |Cell
                                                               IMEDLINE
    ANSWER 49 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
    1995:810659 HCAPLUS
DN
     123:208840
TI
     Hepatocyte-targeted drug conjugates
     Plourde, Robert, Jr.; Carmichael, Ellen; Spitalny, George L.; Findeis,
    Mark A.; Ernst, Michael F.; Robinson, Brett
PΑ
     Targetech, Inc., USA
SO
     PCT Int. Appl., 64 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
     -----
                        ____
                               -----
                                            ______
                                                                   _____
PΙ
    WO 9518636
                         A2
                               19950713
                                           WO 1995-US448
                                                                  19950111 <--
    WO 9518636
                               19950810
                         A3
            AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
            GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
            MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT,
            UA, UZ
        RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
            MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,
            TD, TG
    CA 2180348
                               19950713
                                           CA 1995-2180348
                         AA
                                                                  19950111 <--
    AU 9516791
                               19950801
                                           AU 1995-16791
                         A1
                                                                 19950111 <--
    EP 737077
                         A1
                               19961016
                                         EP 1995-908490
                                                                  19950111 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
    JP 09510696
                         Т2
                               19971028
                                         JP 1995-518699
                                                                 19950111 <--
PRAI US 1994-180207
                         Α
                               19940111
                                         <--
    WO 1995-US448
                         W
                               19950111 <--
AΒ
    The invention provides conjugates for targeting a therapeutic agent to a
    cell with asialoglycoprotein receptors. The conjugates comprise a
     therapeutic agent and ligand for the asialoglycoprotein receptor, wherein
```

the therapeutic agent and the ligand are linked by a bridging agent. The bridging agent can be a crosslinker, a polyfunctional carrier mol. or a crosslinker and a polyfunctional carrier mol. In a preferred embodiment, the therapeutic agent is a nucleoside analog or colchicine and the ligand is asialoorosomucoid, arabinogalactan or a tris-(N-acetyl galactosamine aminohexyl glycoside) amide of tyrosyl(glutamyl)-glutamate. Preferred crosslinkers include aminoacyl derivs., carboxyacyl derivs., phosphate, peptides and reductively-labile crosslinkers. Preferred polyfunctional carrier mols. include polyamino acids and polysaccharides. The conjugates of the invention can be used to target a therapeutic agent to a cell, for example to inhibit viral DNA replication in a virally-infected hepatocyte.

TT 7481-89-2DP, reaction products with polyaldehyde dextran, conjugates with asialoorosomucoids

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prodrugs for drug targeting to asialoglycoprotein receptors of

hepatocytes)

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 7481-89-2, 2',3'-Dideoxycytidine

RL: RCT (Reactant); RACT (Reactant or reagent)
(prodrugs for drug targeting to asialoglycoprotein receptors of hepatocytes)

RN 7481-89-2 HCAPLUS

CN Cytidine, 2',3'-dideoxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L37 ANSWER 50 OF 50 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:23538 HCAPLUS

DN 120:23538

TI Compositions of N-(phosphonoacetyl)-L-aspartic acid and methods of their use as broad spectrum antivirals

IN Blough, Herbert A.

PA U.S. Bioscience, Inc., USA

SO PCT Int. Appl., 134 pp.

CODEN: PIXXD2

```
DT
    Patent
LA
    English
FAN.CNT 2
                              DATE
                                         APPLICATION NO.
    PATENT NO.
                       KIND
                                                               DATE
                                         -----
    -----
                       ____
                              _____
                                                                -----
                              19930930 WO 1993-US2432 19930318 <--
PΙ
    WO 9318763
                        A1
        W: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KR, KZ, LK, MG, MN, MW, NO,
            NZ, PL, RO, RU, SD, SK, UA
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
          BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG
    US 5491135.
                        Α
                              19960213
                                          US 1993-32234
                                                                19930317 <--
    AU 9339659
                        A1
                              19931021
                                          AU 1993-39659
                                                                19930318 <--
    EP 660710
                                       EP 1993-909132
                        A1
                              19950705
                                                               19930318 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                       JP 1993-516700
    JP 07507770
                        Т2
                              19950831
                                                               19930318 <--
    BR 9306123
                        Α
                              19970826
                                         BR 1993-6123
                                                                19930318 <--
PRAI US 1992-853454
                        Α
                              19920318
                                       <--
    US 1993-32234
                        Α
                              19930317 <--
    WO 1993-US2432
                       Α
                              19930318 <--
    Antiviral compns. are described which contain the title compound and
AB
    \geq 1 other antiviral agent which act synergistically or additively.
ΙT
    151779-22-5
    RL: BIOL (Biological study)
       (as virucide)
RN
    151779-22-5 HCAPLUS
CN
    L-Aspartic acid, N-(phosphonoacetyl)-, mixt. with 2',3'-dideoxycytidine
    (9CI) (CA INDEX NAME)
    CM
    CRN 51321-79-0
    CMF C6 H10 N O8 P
```

Absolute stereochemistry.

CM 2

CRN 7481-89-2 CMF C9 H13 N3 O3

Absolute stereochemistry. Rotation (+).